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STATE OF MICHIGAN

ECONOMIC REPORT of the Governor

1985

JAMES J. BLANCHARD, Governor

Transmitted to the Michigan Legislature
December 1985

James J. Blanchard
Governor

STATE OF MICHIGAN
OFFICE OF THE GOVERNOR
LANSING

JAMES J. BLANCHARD
GOVERNOR

December 1985

To the Members of the Michigan Legislature and
the People of the State of Michigan:

Our state is stronger and the future more secure because of the continuing economic growth occurring throughout Michigan. More people are back on the job, family income is up and consumer confidence is strong. As shown in the Economic Report, Michigan's recovery remains solid and has the potential for continued economic growth in the future.

Improvement is evident in virtually every sector of our economy:

- In 1984, Michigan's increase in jobs was considerably higher than the national rate, and was two-thirds higher than the rate for the other Great Lakes' states.

- Average family income in our state grew substantially in 1984, enabling people to not only beat inflation for the second year in a row, but to recover from the four straight years of declining income they suffered during the last recession.

- Major sectors of Michigan's economy recorded strong progress:

  - auto sales were up 13 percent over the previous year
  - retail sales grew substantially, increasing 9.8 percent over 1983
  - residential building permits increased sharply for the second consecutive year

- For the first time in five years, Michigan grew in population in 1984 as people found our state a good place in which to live and work and invest.

- Our economy became more diversified in 1984--and less vulnerable to downturns at the national level.

The statistics in the Economic Report cannot tell the whole story. They don't show the confidence restored to a worker who can again afford to support a family. They don't show the vitality regained by a child who now gets nutritious meals every day, or the optimism of a college graduate who can look forward to finding a good job in Michigan.

The people of our state not only benefit from the accomplishments described in this report, they deserve the credit for them. By working together, our citizens have made Michigan's comeback possible.

But we cannot forget that further progress depends on continued effort. It is critical that we adhere to our economic recovery plan to make sure we sustain the progress we've achieved so far--as well as to insure future success.

Historically, Michigan has been able to rebound quickly after a national recession, with economic activity picking up more rapidly here than in most other states. Each time the upturn would occur, Michigan citizens would go back to work, try to rebuild and begin to look toward the future with hope. Then the economic cycle would level off and change direction. New problems would arise at the national level and our state would be more vulnerable than most to a new recession.

This traditional pattern--the sharp decline which has followed vigorous growth--must be broken.

Through extraordinary effort we are attempting to break the old pattern and minimize the impact of future downturns. While still recovering from the last recession, we are also building a new and more diverse foundation.

From this position of strength and commitment to long-term recovery, we can look to a better future for Michigan.

Sincerely,

James J. Blanchard

James J. Blanchard
Governor

STATE OF MICHIGAN

JAMES J. BLANCHARD, Governor

DEPARTMENT OF MANAGEMENT AND BUDGET

P.O. BOX 30026, LANSING, MICHIGAN 48909
ROBERT H. NAFTALY, Director

December 1985

The Honorable James J. Blanchard
Governor of Michigan
State Capitol
Lansing, Michigan 48909

Dear Governor Blanchard:

It is my pleasure to submit to you today the 1985 Economic Report which highlights the important developments in the Michigan and the United States economies during 1984 and the continued economic recovery in Michigan in 1985.

The report examines in detail the significant improvements in job opportunities, personal income, and purchasing power which our citizens have experienced since the beginning of the economic recovery in 1983. It also includes extensive historical data on Michigan employment, population growth, and economic activity by major sector.

As this report states, Michigan real personal income increased 3.3 percent in 1983 and 5.8 percent in 1984, following four consecutive years of decline. The two year combined growth rate of 9.1 percent is significantly higher than the national growth rate of 6.9 percent. This improvement in the real standard of living of our citizens has been continuing throughout 1985.

The growth in Michigan personal income mirrors the substantial gain in total job growth since 1983. Michigan gained over 225,000 jobs from 1982 to 1984. With a very strong increase of 192,000 jobs in 1984, Michigan's 5.2 percent growth in total employment exceeded the U.S. growth rate of 4.1 percent and was over two-thirds stronger than employment growth in the other

Clearly, the Michigan economy has enjoyed stronger growth so far in this economic recovery than either the U.S. economy or the economies of our neighboring states.

The additional new jobs created over the past few years has resulted in a sharp drop in unemployment from 15.5 percent in 1982 to 11.2 percent in 1984. We expect the unemployment rate to continue to fall to 10.2 percent for 1985. Despite this substantial improvement, over 450,000 Michigan workers are still unable to find jobs. Continued efforts to foster economic development and job creation will be needed to reduce this unacceptably high level of unemployment and to return Michigan employment to the levels reached in the late 1970s, before the last devastating recession. Unfortunately, the federal budget deficit in excess of $200 billion and the international trade deficit of over $150 billion, pose serious threats to our long-term state economic recovery program.

The *Economic Report* is produced by the Office of Revenue and Tax Analysis, Michigan Department of Management and Budget. Updated data and additional articles discussing current economic developments appear in the office's bi-monthly newsletter, *Michigan Economic Review and Outlook*.

Valuable contributions to this year's report were made by the Michigan Departments of Agriculture, Commerce, Natural Resources, Transportation and Treasury, and by the Office of the Budget, Michigan Department of Management and Budget.

Sincerely,

Director

CONTENTS

Economic Review and Outlook 3

National Economic Issues

International Trade 8

Monetary Policy and Interest Rate Outlook 14

The Michigan Economy

Employment and Unemployment 22

Personal Income 32

Prices 43

Consumer Spending 47

Population 53

Michigan Sector Analysis

Motor Vehicle Industry 61

Tourism 70

Michigan Agriculture 74

Energy and Mineral Industries 82

Transportation 94

Housing and Construction 98

Intergovernmental Issues and Local Resources 107

Appendix A: Summary of 1984 Economic Events 114

Appendix B: Selected Public Acts of 1984 118

Appendix C: Statistical Tables 126

TABLES AND CHARTS

Tables

Tables		Page
1	U.S. International Trade Balance, 1983-1985	9
2	Trade Under the U.S. Automotive Agreement With Canada, 1983 and 1984	11
3	Michigan Agricultural Exports, Fiscal Years 1983 and 1984	12
4	U.S. Money Stock, 1983 and 1984	15
5	U.S. Financial Deposits, 1983 and 1984	18
6	Time and Savings Deposits at Michigan Financial Institutions, 1978-1984	19
7	Michigan Labor Force and Employment, Selected Years	23
8	Michigan Labor Market Unemployment Rates, 1982-1984	24
9	Michigan Unemployed and Regular Unemployment Beneficiaries, 1982-1984	25
10	Detroit PMSA and Balance of State Employment, 1982-1984	26
11	Michigan Manufacturing Industry Employment, 1982-1984	28
12	Michigan Nonmanufacturing Industry Employment, 1982-1984	29
13	Michigan Government Employment, 1982-1984	30
14	Michigan Personal Income, 1970-1984	32
15	Components of Michigan Personal Income, 1983 and 1984	34
16	Michigan Personal Income 1983, 1984 and 1985 Forecast	35
17	Personal Income in Selected States and Regions 1982-1984	38
18	Per Capita Personal Income in Selected States and Regions, 1982-1984	41
19	Detroit Consumer Price Index 1983, 1984 and 1985 Forecast	44
20	Michigan Sales Tax Collections, 1977-1985	48

Page

21 Michigan Sales Tax Collections by Component, 1983 and 1984 50
22 U.S. Consumer Installment Credit, 1979-1984 51
23 Migration of Taxpayers and Their Families in Michigan, 1975-1984 54
24 Migration of Michigan Population by Region of the U.S. and Selected States 1978-1979 through 1982-1983 56
25 Population Change and Net Migration in Michigan Areas, 1980-1983 Annual Average and 1983-1984 59
26 U.S. Motor Vehicle Sales, 1980-1985 62
27 U.S. and Michigan Motor Vehicle Production, 1980-1985 65
28 Michigan Tourist Indicators, 1983 and 1984 71
29 Ranking for Michigan Agricultural Commodities, 1984 76
30 Michigan Cash Receipts from Farm Marketing, 1983 and 1984 77
31 Prices Received by Michigan Farmers, 1984 79
32 Energy Sales and Customers in Michigan, 1983 and 1984 86
33 Regulated Public Utility Revenues, 1983 and 1984 87
34 Michigan Mineral Production, 1983 and 1984 90
35 U.S. New Private Housing Starts, 1973-1984 99
36 Michigan Residential Building Permits, 1974-1984 100
37 New Housing Units Authorized in Michigan Areas, 1979-1984 104
38 Michigan Construction Contract Awards, 1967-1984 105
39 State Shared Revenue Per Capita and Per Tax Dollar, 1984-1985 108
40 State Financial Assistance to Local Units of Government, 1984 and 1985 112

Charts

Page

1 U.S. Trade Balances, 1974-1984 8
2 Market Interest Rates, 1983 and 1984 16
3 Percent Change in Michigan Personal Income, 1979-1984 33
4 Percent Change in Wages and Salaries Derived from Manufacturing, Construction and Service Industries, 1978-1984 36
5 Real Personal Income Growth, Michigan and the U.S., 1970-1984 40
6 Percent Change in Michigan Retail Sales, 1979-1984 47
7 In-Migration and Out-Migration of Federal Taxpayers in Michigan, 1975-1984 53
8 Net Migration of the Population in Metropolitan and Nonmetropolitan Areas in 1970-1980, 1980-1983, and 1983-1984 58
9 U.S. Auto Sales, 1976-1984 63
10 Import Share of U.S. Auto Sales, 1969-1984 63
11 Automobile Product Mix--1984 Michigan Production and U.S. Sales 66
12 Michigan Electric Sales, 1971-1984 85
13 Index of Building Permits for the U.S. and Michigan, 1979-1984 101
14 Michigan Residential Building Permits and Mortgage Rates, 1973-1984 102
15 Percent Change in State Equalized Value, Property Tax Levy, and Average Tax Rate, 1969-1984 111

1985

ECONOMIC REPORT

ECONOMIC REVIEW AND OUTLOOK

U.S. Economy

In 1983 the U.S. economy began to recover from the most severe economic slump since the Great Depression of the 1930s. Real gross national product, the inflation-adjusted value of all goods and services produced in the economy, grew at over a 9 percent annual rate from the first quarter to the second quarter of 1983, as the overall level of economic activity finally returned to that reached in the third quarter of 1981. Real GNP grew 3.7 percent in 1983 following a decline of 2.1 percent in 1982. Strong economic growth continued through the first half of 1984 reaching a peak annual growth rate of 10.1 percent during the first quarter of 1984. Although the rate of growth slowed to 3.6 percent in the second half of 1984, real GNP increased 6.8 percent for the year. The revised estimate for real GNP in the first half of 1985 shows sluggish growth of only 1.1 percent at an annual rate. It appears that growth has accelerated in the second half of 1985 and should result in real GNP growth of 3.1 percent for the entire year (see the summary table).

While the rebound was led by an increase in housing construction and automobile sales in 1983, it was business investment in structures and equipment, along with continued growth in consumer purchases of automobiles, that sustained the growth in 1984. The calendar year 1984 sales level of 10.4 million units marked the first time since 1979 that over 10 million cars had been sold in the United States. Expectations are that automobile sales will total 10.7 million units for 1985. The voluntary import quota on Japanese-made autos was one factor contributing to the three percentage point decline to 23 percent in the import share of U.S. automobile sales in calendar year 1984. With increased imports due to the ending of the voluntary restraint agreement on April 1, the import share is expected to increase to 25.5 percent for calendar year 1985. Inflation-adjusted business fixed investment, the other primary source of continued economic growth, increased almost 20 percent in 1984. This investment has occurred despite historically high real interest rates. The 1985 rate of growth in business investment will be substantially lower, an estimated 9.8 percent, due to reduced growth in purchases of producers' durable equipment and structures. For the first six months of 1985, business fixed investment increased at an annual rate of 6.2 percent.

Inflation, as measured by the U.S. Consumer Price Index for all urban consumers, was moderate in 1983 and 1984, following double-digit percentage increases experienced in the early 1980s. The lower rate of inflation, combined with strong employment and personal income growth, resulted in a 6.7 percent increase in real disposable income in 1984. This increase in disposable income supported an increase in personal consumption of 6.8 percent in 1984 with most of the increase occurring in the purchase of durable goods. However, the economic slowdown occurring in the third quarter of 1984 was, in part, a direct result of an actual decrease in durable goods spending.

Not all of the increase in disposable income resulted in increased consumer expenditures. While the saving rate had declined in 1982 and 1983, consumers increased their rate of saving to an average of 6.1 percent as the economy continued to expand in 1984. Unfortunately, the increased savings from the consumer sector were more than offset by increased borrowing by the U.S. government to finance the sharp increase in federal deficits. This borrowing, combined with the overall increase in economic activity, pushed up interest rates in the third quarter of 1984 when the three-month Treasury bill rate averaged over 10.3 percent.

After lagging behind the overall improvement in the economy during the first half of 1983, the labor market showed considerable strength until mid-1984. From June 1983 to June 1984 the unemployment rate declined almost three percentage points to 7.2 percent. Since then it has remained almost constant. The average rate for 1984 of 7.5 percent was more than two percentage points below the 9.6 percent average for 1983. This decrease was the result of employment growth exceeding growth in the labor force. Employment in the U.S. increased by over 7.2 million people from December 1982 through December 1984. The average level of employment for 1984 stood at just over 105 million people, 4.1 percent above the 1983 level. As the economy continues to expand in 1985, the unemployment rate will decline another 0.2 percentage points to 7.3 percent.

The strong U.S. dollar, while helping to attract needed capital investment from abroad, is having a clear negative impact on growth in U.S. production and employment. This impact was clearly evident in the third quarter of 1984 when much of the increase in consumer spending went to purchase goods produced overseas. From the first half of 1983 to the second half of 1984, an estimated one-third of the growth in U.S. domestic demand was accounted for by overseas production. The overvalued dollar is also leading to a strong surge in capital equipment imports which is weakening domestic production and employment growth.

1985 ECONOMIC FORECAST SUMMARY

	1984	1985 Forecast	Percent Change
UNITED STATES			
Real GNP (Billions of '72 $)	$1,639.3	$1,689.4	3.1
Auto Sales (Millions)	10.4	10.7	2.8
Import Share (Percent)	23.1	25.5	---
Motor Vehicle Production (Millions)	10.9	10.5	- 3.7
Housing Starts (Millions)	1.8	1.7	- 5.5
Unemployment Rate (Percent)	7.5	7.3	---
3-Month Treasury Bill Rate (Percent)	9.6	7.8	---
MICHIGAN			
Real Personal Income (Billions of '67 $)	$ 37.1	$ 38.4	3.5
Motor Vehicle Production (Millions)	2.96	2.94	- 0.1
Employment (Thousands)	3,871	3,980	2.8
Wage & Salary Employment (Thousands)	3,343.3	3,403.7	1.8
Unemployment Rate (Percent)	11.2	10.2	---
Detroit CPI (1967 = 100)	306.9	317.7	3.5

Michigan Economy

The economic recovery in Michigan gained momentum in 1984 as state personal income grew 9.5 percent compared to 6.2 percent in 1983 and 1.8 percent in 1982. Michigan's growth reflected the recovery in the U.S. economy, the continued strength in auto sales and the state's efforts to restore fiscal stability and to promote economic growth. In fact, employment growth in Michigan since the end of the recession has exceeded national job growth by 3.7 percentage points and has exceeded the average growth for all Great Lakes states by over four percentage points. Michigan's growth in manufacturing employment exceeded the U.S. average by an even greater difference. In March 1985, Michigan's total employment exceeded the previous peak reached in July 1979, just before the beginning of the recession. In addition to the improvement in overall employment, the state also made progress in diversifying its economy. The nonmanufacturing portion of the state employment base has increased four percentage points to 55 percent since the late 1970s.

Motor vehicle employment in Michigan responded to the almost 18 percent growth in U.S. automobile sales in 1984. Although Michigan lost some of its share of motor vehicle production as other states regained their more than proportionate loss of share that occurred during the recession, motor vehicle employment in the state rose 6.8 percent in 1984 creating almost 20,000 new jobs. In 1984 Michigan had 27.5 percent of total U.S. motor vehicle production, down from the 33.7 percent share in 1982. With the strong boost from motor vehicle employment, total wage and salary employment increased 3.7 percent in 1984 to 3,343,300 jobs, up 120,200 from the year-earlier level.

The improvement in the overall labor market was quite dramatic. The unemployment rate for 1984, 11.2 percent, was three percentage points lower than the unemployment rate in 1983. Despite the impressive growth in employment since early 1983, Michigan's 1984 unemployment rate was still 3.7 percentage points higher than the U.S. rate and 488,000 people were still unemployed. The unemployment rate is expected to continue to decline slowly to 10.2 percent for 1985 as the number of unemployed workers declines by 37,000.

With the increase in wage and salary jobs, payrolls in Michigan increased 10.2 percent in 1984 to a level of $69,645 million; personal income increased by 9.5 percent to a level of $113,956. The expected 2.8 percent increase in employment for 1985 should generate a 7.1 percent increase in personal income for the entire year.

Retail prices as measured by the Detroit Consumer Price Index also mirrored the pattern at the national level in 1984 with inflation rising at a 3.5 percent rate, well below the double-digit rates in the late 1970s and early 1980s. As a result of strong state personal income growth and a low rate of inflation, Michigan real personal income--after removing the impact of inflation--increased 5.8 percent in 1984 to a level of $37,125 million. This is the second consecutive year of real income growth following four straight years (1979 through 1982) of falling real income during the recession. However, even with the economic growth in 1985, Michigan real personal income will still be slightly below the peak level reached in 1978.

NATIONAL ECONOMIC ISSUES

- International Trade
- Monetary Policy and Interest Rate Outlook

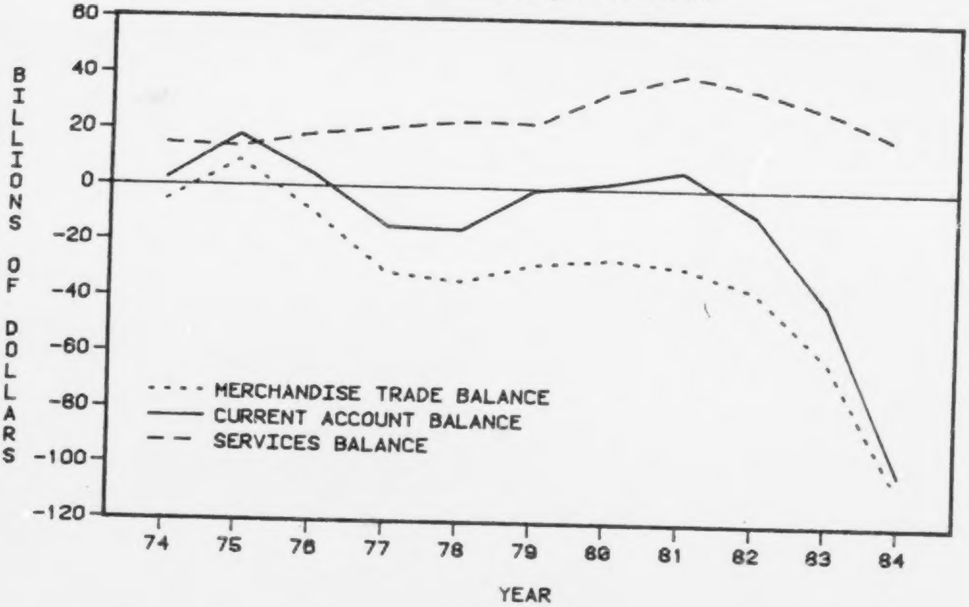
INTERNATIONAL TRADE

Imports Surge in 1984

In 1984, the U.S. international trade deficit worsened significantly as the growth of the U.S. economy surpassed that of other industrialized trading partners and the trade-weighted value of the dollar increased 11.8 percent. The strong dollar has contributed to higher-priced U.S. exports and lower-priced imports. As imports of merchandise goods and services surged 24.4 percent in 1984, exports grew by 8.4 percent. The resulting sharp deterioration in the merchandise trade balance is clearly evident in Chart 1.

Chart 1

U.S. Trade Balances, 1974-1984



A review of the economic factors contributing to the strong dollar indicates that inflation-induced changes in the exchange rate have recently been minimal. The exchange rate is the ratio of the number of units of one currency that can be exchanged for a unit of another. From 1980 to 1984, nearly 96 percent of the change in the U.S. exchange rate was real, rather than inflationary. Real changes in the exchange rate result in changes in purchasing power and indicate that significant structural changes have occurred in the economy, the tax laws, or in altered expectations about future yields on assets. An historically high level of interest rates in the U.S., reflecting continued federal deficits in excess of $200 billion, is an important structural factor in explaining the strong dollar.

The deficit in the U.S. current account, the broadest measure of U.S. international trade and financial transactions, increased from $3.1 billion in the first quarter of 1983 to a peak of $32.5 billion in the third quarter of 1984 (see Table 1). The annual current account deficit increased from $40.8 billion in 1983 to $101.5 billion in 1984.

Table 1

U.S. International Trade Balance, 1983-1985
(Billions)

	Merchandise Balance			
Period	Exports	Imports	Net Balance	Balance on Current Account
1983 I	$ 49.2	$ 58.8	$- 9.6	$- 3.1
II	48.9	63.6	-14.7	- 9.0
III	50.4	67.6	-17.2	-11.3
IV	52.3	72.7	-20.4	-17.4
1984 I	53.8	79.3	-25.5	-19.1
II	54.7	80.3	-25.6	-24.5
III	55.5	88.0	-32.5	-32.5
IV	56.4	80.9	-24.5	-25.5
1985 I	55.7	84.4	-28.7	-30.0
II	52.6	86.4	-33.8	n.a.

Source: Economic Indicators, Council of Economic Advisors.

A second indicator of international activity, the U.S. merchandise trade balance (i.e. exports minus imports of goods), continues to weaken from a deficit of $9.6 billion in the first quarter of 1983 to a deficit of $33.8 billion in the third quarter of 1985. For the year, the 1984 merchandise trade deficit soared to $108.3 billion from the 1983 deficit of $62 billion. A negative U.S. merchandise balance indicates that the dollar value of U.S. exports falls short of the value of U.S. imports.

As noted above, the merchandise trade deficit widened in 1984 as imports increased faster than exports. U.S. exports rose slightly over the two-year period from $49.2 billion in the first quarter of 1983 to $56.4 billion in the fourth quarter of 1984. Imports increased from $58.8 billion in the first quarter of 1983 to a peak of $88.0 billion in the third quarter of 1984. The sharp jump in the value of imports occurred even though the cost of imported oil has declined since 1981, due to shifts in energy sources and increased conservation measures. Despite this cost improvement, the trade deficit continues to expand. The economic downturn during the early 1980s provided the basis for growing support for trade policies to preserve domestic industries and jobs. This sentiment was evident in 1984 when the U.S. Senate passed a resolution condemning Japan's unfair trading practices. This resolution illustrates the tension which has built up between the U.S. and Japan over U.S. access to Japanese markets.

This tension has intensified since the lifting of the voluntary restraint agreement on Japanese auto imports in April of this year. (The economic impact of this change on Michigan is discussed in detail in the automotive section of this report.) The lifting of this restraint, along with a continuing deterioration in the U.S. trade balance, has increased the demand for protection from foreign competition. Opponents of trade restrictions claim that there could be further retaliation by foreign countries against American exports, which could adversely affect export-related jobs in the U.S.

Michigan Exports

The value of Michigan exports has continued on an upward trend, rising nearly threefold from $3.5 billion in 1972 to $10.3 billion in 1981. Michigan's relatively strong growth of manufacturing exports has contributed to an increase in the share of export employment in total state manufacturing employment. In 1981 the percent of total employees involved in the direct manufacturing of exports increased to 7.6 percent from 7.4 percent in 1980. In addition to the 74,400 employed in the direct manufacturing of exports in 1981, another 68,400 worked in jobs supporting export manufacturing. The total of direct and supporting Michigan export manufacturing jobs reached 14.6 percent of total manufacturing employment in 1981.

Canada is one of Michigan's major trading partners, due to trade in autos, trucks, parts and tires. The U.S. auto trade balance deteriorated from a deficit of $2.6 billion in 1983 to a deficit $3.9 billion in 1984, a $1.3 billion increase in the deficit (see Table 2). U.S. imports of Canadian cars increased from $7.3 billion in 1983 to $10.1 billion in 1984, and trucks increased from $3.6 billion in 1983 to $4.5 billion in 1984. The value of U.S. car exports rose from $3.9 billion in 1983 to $4.7 billion in 1984, and U.S. truck exports increased from $0.9 billion in 1983 to $1.6 billion in 1984. Although the U.S. motor vehicle balance of trade worsened, the U.S. recorded an improvement in the balance of trade for parts, Michigan's major auto-related export. Parts exports increased from $9.3 billion in 1983 to $12.5 billion in 1984. The total dollar value of U.S. trade (the sum of exports and imports) under the automotive agreement increased from $31.2 billion in 1983 to $42.1 billion in 1984, a 34.9 percent increase.

Table 2

Trade Under the U.S. Automotive Agreement
With Canada, 1983 and 1984
(Billions)

	1983			1984		
Commodity	U.S. Exports	U.S. Imports	Balance	U.S. Exports	U.S. Imports	Balance
Cars	$ 3.9	$ 7.3	$-3.4	$ 4.7	$10.1	$-5.4
Trucks	0.9	3.6	-2.7	1.6	4.5	-2.9
Parts	9.3	5.7	3.6	12.5	7.9	4.6
Tires & Tubes	0.2	0.3	-0.1	0.3	0.5	-0.2
Total	$14.3	$16.9	$-2.6	$19.1	$23.0	$-3.9

Source: U.S. Department of Commerce.

The importance of international trade in the Michigan economy is evident in Table 3. Michigan agricultural exports increased 14.4 percent from $713.8 million in fiscal 1983 to $816.7 million in fiscal 1984. Most of the increase is due to rising shipments of feed grains, soybeans and wheat, which accounted for nearly 98 percent of the increase.

Table 3

Michigan Agricultural Exports, Fiscal Years 1983 and 1984
(Millions)

Commodity Group	FY 1983	FY 1984	Percent of Total
Feed Grains	$291.0	$355.1	43.5
Vegetables & Dry Edible Beans	107.6	108.6	13.3
Soybeans	125.5	156.0	19.1
Wheat	67.2	73.3	9.0
Fruit	28.8	26.6	3.3
Hides & Skins	13.4	18.5	2.3
Animals & Meats (excl. Poultry)	30.6	24.6	3.0
Dairy Products	23.4	26.3	3.2
Fats, Oils, & Greases	9.4	11.0	1.3
Poultry Products	1.8	1.3	0.1
Other	15.1	15.4	1.9
Total	$713.8	$816.7	100.0

Source: Foreign Agricultural Trade of the United States, U.S. Department of Agriculture, Economic Research Service, May/June 1984.

Michigan's ranking increased to 15th among all states in exports of agricultural products in fiscal 1984, compared with 17th in fiscal 1983. The top ten states ranked in descending order of the value of agricultural exports were Iowa with $3.44 billion, Illinois with $3.28 billion, California with $2.65 billion, followed by Nebraska, Texas, Kansas, Minnesota, Indiana, North Dakota and Ohio. For individual commodity groups, Michigan's exports of vegetable and dairy products ranked fourth in the nation. In addition, Michigan ranked sixth in exports of fruit and eighth in feed grains and products.

State government has been instrumental in increasing Michigan's participation in international trade. In 1984, Governor Blanchard led a Michigan trade delegation to Japan and China which resulted in a number of new contracts for Michigan firms. As a result of these trade missions, several Michigan firms have established a presence in the China market. Joint venture agreements involving Michigan firms have been negotiated in Qingdao, Beijing, Tianjin and Hubei Provinces. To increase exports of farm equipment, Michigan recently entered into an agreement with Sichuan Province to establish a model farm there. China will provide the labor and Michigan will provide technical expertise.

Other state sponsored trade events throughout the world have resulted in substantial gains for Michigan firms. A recent trade mission to West Africa, for example, resulted in direct sales for many of the participating firms. In 1985, long-term joint-venture manufacturing agreements were signed with several Nigerian firms and a Michigan firm is now providing over $600,000 worth of grain, primarily corn, to Nigeria. Further, a Michigan agricultural export firm agreed to supply equipment and managerial expertise to one of Nigeria's leading agricultural interests. State assistance has also been instrumental in increasing Michigan exports to other parts of the world. Over $1.7 million in special machine tools were recently sold to a major auto manufacturer of Italy, and a Michigan firm is exporting $20 million in goods and services to Indonesia this year.

Trade Deficits Continue to Grow

Both the merchandise trade and the current account deficit balances are expected to worsen in 1985. As the average trade-weighted value of the dollar increased in early 1985, relative prices shifted against U.S. exports. The weakening of the dollar, which began in February, is expected to continue through 1985. Due to this factor, imports are expected to increase 3 percent, while exports will decrease nearly 3.5 percent in 1985. Exports of consumer goods and agricultural products remain weak due to good harvest prospects overseas, slow growth in consumption by foreign countries and the strong dollar. While the overall growth rate of exports is expected to remain weak, exports should be positively influenced by the relatively stronger growth rates of foreign economies in 1985.

Although the U.S. economy has benefited from the significant inflow of foreign capital due to high real U.S. interest rates and the strong dollar, benefits are outweighed by the significant negative impact of the growing trade deficit on U.S. manufacturing jobs. This will continue to be a major concern into 1986. In addition, as the U.S. accumulates more foreign debt, and interest and equity payments rise, a larger share of future U.S. income will be sent overseas.

MONETARY POLICY AND THE INTEREST RATE OUTLOOK

Short Term Variability

Monetary policy was characterized by slower expansion of both the money supply and the adjusted monetary base in 1984 as compared to 1983. This situation, combined with a generally improving economy in 1984, led to a rise in short term interest rates around midyear. From January to August, the three-month Treasury bill rate rose 1.56 percentage points while long-term rates rose by smaller amounts. As the economy weakened in the third quarter of 1984, interest rates eased again with the three-month Treasury bill rate declining 2.3 percentage points from the August high. Interest rates were higher in 1984 than in 1983, reversing the decline in interest rates that began in mid-1982 and that helped trigger the economic recovery.

Unfortunately, 1984 saw a rise in bank failures above the levels of the previous two years to a post-Depression record number of seventy-nine. Although not technically a bank failure, Continental Illinois--the largest commercial bank in the Midwest--required massive aid from the Federal Reserve system and had to be reorganized. The bank failures reflected a combination of management problems and the effects of lower inflation rates on such industries as real estate, agriculture and petroleum exploration. Bank deregulation, combined with the relatively high real interest rates throughout the year, intensified bank competition in 1984.

An important characteristic of the current economic recovery is the continued high levels of real interest rates. The 1984 three-month Treasury bill rate averaged 9.6 percent, but the U.S. inflation rate averaged only 4.3 percent for the year. Using the difference in these rates as an approximate measure, the real rate of interest on this nearly riskless short-term investment averaged 5.3 percent in 1984. This contrasts sharply with the negative real rates of interest experienced in 1979 and 1980 when nominal Treasury bill rates averaged almost 11 percent and inflation averaged 12.4 percent (see Table C-20 for the historical series on interest). Major factors explaining these historically high real interest rates were relatively restrained monetary growth combined with heavy credit demands, especially from the federal government's need to finance an annual deficit approaching $200 billion. While fears of capital losses through higher inflation in the future may add an additional component to longer-term real rates, it is not much of a factor for short-term securities.

Monetary Growth Moderates in 1984

As shown in Table 4, monetary growth moderated in 1984 by any of the major measures. The growth in money supply, as measured by M1, fell from 10.4 percent to 5.2 percent, averaged over four quarters. The rate of growth in M1 dropped to a low of 3.2 percent in the fourth quarter. The decline was smaller in the rate of growth of the broader money supply measure M2, which contains savings deposits, small time deposits and money market funds. The lower rate of decline reflects, in part, the shift of deposits among accounts which differ in the definitions

Table 4

U.S. Money Stock, 1983 and 1984
(Quarterly Percent Change at Annual Rates, Seasonally Adjusted)

Year		M1[1]	M2[2]	Monetary Base[3]
1983:	I	11.8	22.2	11.8
	II	12.7	10.9	11.2
	III	10.6	7.8	7.4
	IV	6.5	8.6	7.9
Average		10.4	12.4	9.6
1984:	I	6.4	7.4	8.6
	II	6.7	7.2	9.5
	III	4.6	7.0	6.4
	IV	3.2	9.3	4.8
Average		5.2	7.7	7.3

[1] Includes currency and commercial bank demand deposits held by the nonbank public and other checkable deposits of all depository institutions, plus traveler's checks.

[2] M1 plus money market fund deposits, savings and small time deposits, overnight repurchase agreements and Eurodollars.

[3] Adjusted monetary base includes reserve accounts at Federal Reserve banks and currency in circulation.

Source: Monetary Trends, Federal Reserve Bank of St. Louis, March 1985.

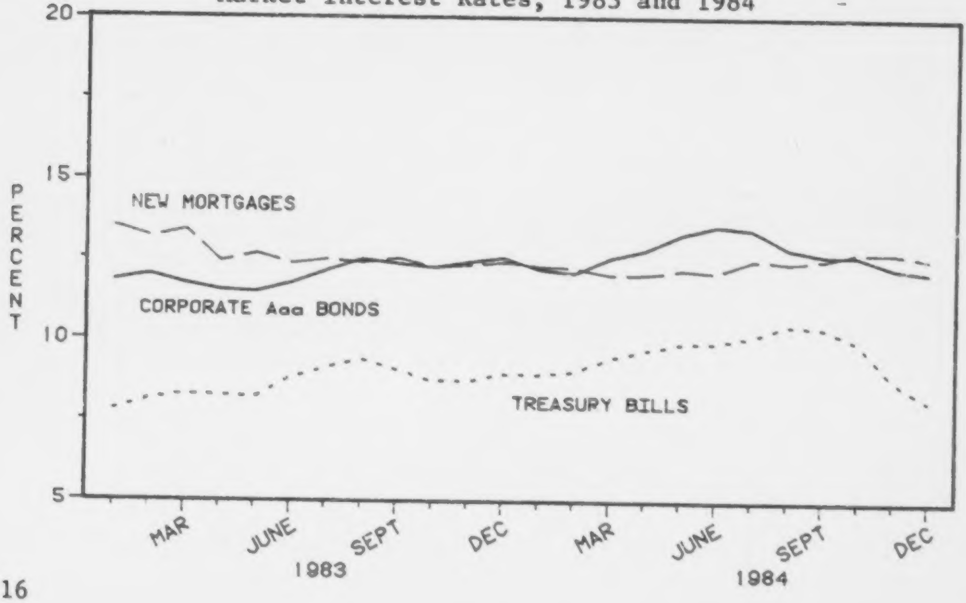
of money supply. It is interesting to note that the monetary base, the money supply component most subject to Federal Reserve control, slowed less than either M1 or M2, rising 9.6 percent in 1983 and 7.3 percent in 1984. The growth rate of the monetary base has been declining since the first quarter of 1983, except for a surge coinciding with the strong economic growth in the first two quarters of 1984. However, the monetary base has been converted into money supply at a declining rate during this period. Factors believed to be causing this trend are the shift by the Federal Reserve to the use of contemporaneous reserve requirements (CRR) and the growth of large time deposits. The use of CRR increases the reserves banks must hold, while the rise in large time deposits leaves fewer available reserves to support the M1 and M2 measures of money.

Interest Rates Rise and then Moderate

The general slowing in the growth of the money supply is consistent with the moderate rise in interest rates and the slowing of the economy that occurred in 1984. As noted earlier, short-term rates rose sharply in mid-1984 and then declined again late in the year as economic activity slowed. Longer-term rates reflected a similar pattern but rose by a smaller amount as shown in Chart 2. Corporate bond rates peaked in June at

Chart 2

Market Interest Rates, 1983 and 1984



13.55 percent, over 2 percentage points above the recovery low in May 1983. While this increase in interest rates partly reflected a stronger economy, it also reflected the efforts of some corporations to lengthen maturities of their debt in the face of the heavy credit demands of the U.S. Treasury. Many firms had been "locked-in" to short-term borrowing during the 1980-1982 recession by high interest rates and sought to lengthen maturities when rates declined. By December, the corporate Aaa bond rate was back to its level of early 1984.

Early 1984 was characterized by a surge in corporate bank borrowing. This was somewhat unexpected in view of the strong profits and cash flow resulting from both the recovery and lower federal taxes under the Economic Recovery Tax Act of 1981. This surge appears to have been due in part to a substitution of debt for equity by corporations. This substitution was accelerated by stock buybacks and leveraged buyouts, both of which were unusually heavy in 1984. This debt restructuring could pose a problem for firms in the future if they do not remain profitable enough to service this added debt.

Mortgage rates were somewhat less volatile compared to corporate rates. After falling sharply in 1982 and early 1983, mortgage rates drifted lower until early 1984 and then rose approximately three-quarters of a percentage point by November. While this held residential building construction below otherwise attainable levels it did not entirely eliminate growth in the construction industry because of the moderate increase and because many markets were not overbuilt. The mortgage market appears to have benefited from innovations, such as an expanding secondary market and the growth of variable-rate mortgages, that have lessened its vulnerability to changing monetary conditions. Top-quality municipal bonds responded similarly to corporate bonds in 1984 although their rate increase, only slightly over one percentage point, was less than the corporate rate increase. Over recent years the gap between corporate and municipal tax exempt interest rates has narrowed because of the heavy supply of tax exempt debt and because of reduced demand from institutions for municipal debt.

Deposit Growth Continues

Savings and time deposits increased in 1984 by 12.8 percent. Improving income levels, a slightly higher savings rate and rising business activity appear to have been the major factors. All types of time and savings deposits increased in dollar value except regular savings deposits (see Table 5). The lower interest rates allowed on regular savings deposits resulted in a continued transfer into other savings vehicles.

The dramatic growth of money market deposit accounts slowed in 1984 as rates paid on money market mutual fund shares again became competitive. After banks and savings and loans were allowed to provide money market deposit accounts in late 1982, they used higher interest rates to draw money away from money market mutual funds. During the first half of 1983, rates tended to return to market levels resulting in recovery of money market mutual funds in 1984. The rapid growth in large time deposits that occurred in 1984, with its potential to lower the money multiplier by increasing reserve requirements, can clearly be seen in the 25.6 percent growth in this type of deposit. This would mean that a given amount of monetary base would support less money supply. Also, large denomination time deposits are not covered by federal deposit insurance making them a volatile source of funds if a financial institution is viewed as having difficulties.

Michigan shared in the growth of time and savings deposits as shown in Table 6. While the table shows only a 2.4 percent increase in total deposits, after adjusting for the relocation

Table 6

Time and Savings Deposits at Michigan
Financial Institutions, 1978-1984
(Billions)

	1978	1979	1980	1981	1982	1983	1984
Commercial Banks	\$26.6	\$29.1	\$31.0	\$34.2	\$37.1	\$40.5	\$43.8[1]
Savings and Loans	13.2	14.4	15.9	15.9	15.4	21.8	19.3[2]
Credit Unions	3.2	3.5	3.6	3.7	4.2	4.9	5.6
Total	\$43.0	\$47.0	\$50.5	\$53.8	\$56.7	\$67.2	\$68.7

[1] Estimated.

[2] This reflects the movement of several savings and loan headquarters from the state. Actual savings and time deposits in Michigan savings and loans rose an estimated 6 percent.

Source: Federal Deposit Insurance Corporation; Federal Home Loan Bank of Indianapolis; Michigan Credit Union League.

of some headquarters operations out of state, a 7.9 percent increase is a more accurate measure of the growth in deposits actually located in Michigan. Time and savings deposits at Michigan commercial banks grew 8.1 percent in 1984, while those at credit unions grew by 14.3 percent. The extremely rapid growth of deposits in 1983, especially at the savings and loans, resulted in part from the growth in newly-introduced money market deposit accounts at such institutions. The 1984 figures are relatively free of distortion from regulatory changes.

Financial Developments in 1985

The financial situation for 1985 includes the continued deregulation of the type of deposit a financial institution may offer. On January 1, 1985 the minimum denomination for money market deposit accounts and Super NOWs was reduced from $2,500 to $1,000. On January 1, 1986 the phase-out of these minimum balances will be completed with minimum legal balances for these accounts completely eliminated. This move will allow financial institutions to completely determine deposit rates and minimums in a competitive environment. In other areas deregulation is less certain. Because of the costly failure of several smaller firms trading in federal government securities, pressure for regulation in this area has increased. The size of the federal deficit is so large that the potential is growing for the mismanagement or abuse by dealers in this market.

Money supply growth during the first half of 1985 reflected an easier Federal Reserve policy as the money supply expanded near or above the Federal Reserve targets early in the year. The Federal Reserve target on M1 is for a rate of growth between 4 and 7 percent. The more accommodating monetary policy stance is expected to continue given the relatively weak economic growth during the first half of the year, the continued strength of the dollar despite recent weakening, the still present problems of large debtor nations and the continuing weakness in the agricultural and manufacturing sectors of the economy. Later in the year economic improvement causes a rise in private credit demands that are added to the already large credit demands of the federal government. This will raise interest rates above their relatively low levels of midyear 1985, thus slowing the economy later in 1986.

The rate on short-term Treasury bills is estimated to average 8 percent. At the long end of the bond maturity market, top-quality corporate bonds are expected to average 12 percent. These rates reflect a slightly stronger economy late in the year, as well as the requirements of financing the federal deficit and some tightening of the money supply by the Federal Reserve. This means that relatively high real interest rates will continue through the end of 1985 and into 1986.

Areas of strain within the financial system include problem loans and inadequate capital at some financial institutions. Progress is being made in both strengthening the financial institutions and lessening this burden. Strong exports by many of the debtor nations eased the foreign debt crisis. International debts remain a risk to the financial system because the ability of the U.S. to absorb more exports is limited by our serious balance-of-payments deficit problem. Continued slow growth in European economies will also restrain the growth in their markets. The expanding federal deficit continues to keep interest rates higher than otherwise expected and poses the longer-term threat of forcing a tough choice between higher interest rates which could harm employment and incomes, and an expansion of the money supply rapid enough to rekindle inflation. While these problems may cause some difficulties in the Michigan economy, none are serious enough to prevent continued economic improvement through the balance of 1985.

THE MICHIGAN ECONOMY

- Employment and Unemployment
- Personal Income
- Prices
- Consumer Spending
- Population

EMPLOYMENT AND UNEMPLOYMENT

Michigan Employment Growth Outpaces U.S. in 1984

In 1984, Michigan's labor market continued to improve from the severely depressed employment situation of 1982. Employment opportunities expanded with continued improvement in motor vehicle production, a higher level of business fixed investment and a higher overall level of real economic activity. The strong economic improvement in the state resulted in a 1984 employment level of 3,871,000--an increase of 192,000 or 5.2 percent (see Table 7). As the economy improved, there was also a net increase of 72,000 in the labor force, those people employed or actively seeking employment. The 1984 growth in employment in Michigan exceeded the 4.1 percent growth for the U.S. as a whole and was two-thirds larger than the 3.1 percent growth experienced by the other East North Central states combined. (Indiana's employment growth of 4.7 percent ranked second in the region.)

Michigan's annual average unemployment rate for 1984 declined three percentage points to 11.2 percent. This improvement resulted in a 120,000 reduction in the number of unemployed, but still left 488,000 people looking for work. Michigan's unemployment rate for 1984 was 3.7 percentage points above the national average and 2.3 percentage points above the average for other states in the East North Central region.

While the overall rate of unemployment averaged 11.2 percent in 1984, the jobless rate in selected large Michigan labor markets varied substantially. As shown in Table 8, the Upper Peninsula continued to have the highest unemployment rate at 14.8 percent in 1984, a decrease of 2.6 percentage points from 1983. The Muskegon labor market recorded the largest percentage point decline of 4.9 percentage points as it moved from the second highest unemployment rate in 1983 to the fifth highest rate in 1984. The newly defined Saginaw-Bay City-Midland Metropolitan Statistical Area experienced the second highest unemployment rate at 13.3 percent. The lowest unemployment rates shown in the table include Ann Arbor and Kalamazoo with rates of 7.0 percent and 7.6 percent, respectively. Lansing-East Lansing was the only large labor market to experience an increase in its 1984 unemployment rate as the rate rose 0.4 of a percentage point to 10.1 percent. Unemployment rate differences for the large labor markets spanned 7.8 percentage points in 1984, just below the 7.9 percentage point span of 1983.

Table 5

U.S. Financial Deposits, 1983 and 1984

(End of Quarter Monthly Averages in Billions of Dollars, Seasonally Adjusted)

	Savings Deposits	Small Denomination Time Deposits	Large Denomination Time Deposits	Money Market Deposit Accounts	Money Market Mutual Fund Shares
December 1982	357.8	851.5	328.3	43.2	236.3
March 1983	319.7	734.1	292.4	323.1	201.5
June 1983	318.1	730.0	301.4	370.9	182.4
September 1983	314.9	750.5	317.8	372.4	179.6
December 1983	307.0	784.6	330.8	379.2	181.4
March 1984	302.9	802.3	349.7	396.9	189.9
June 1984	300.8	834.3	379.5	397.8	194.6
September 1984	294.5	864.4	396.1	388.7	198.9
December 1984	288.5	885.1	416.8	415.2	230.8
1983 Growth Rate (%)	- 12.0	- 7.9	0.8	778.6	- 23.2
1984 Growth Rate (%)	- 6.0	12.8	26.0	9.5[1]	27.2

---

[1] Growth rate from March to December 1984.

Source: Economic Indicators, Council of Economic Advisors, selected issues.

Table 7

Michigan Labor Force and Employment, Selected Years
(Thousands)

Labor Force	1979	1983	1984	1985 Forecast	Percent Change 1983-84	Percent Change 1984-85
Total Labor Force	4,314.0	4,287.0	4,359.0	4,431.0	1.7	1.7
Employment	3,979.0	3,679.0	3,871.0	3,980.0	5.2	2.8
Unemployment	335.0	608.0	488.0	451.0	-19.7	- 7.6
Unemployment Rate	7.8	14.2	11.2	10.2	—	—
Wage and Salary Employment	3,637.1	3,223.1	3,343.3	3,403.7	3.7	1.8
Manufacturing	1,160.2	880.5	945.8	962.5	7.4	1.8
Durable Goods	935.1	685.8	743.7	758.7	8.4	2.0
Nondurable Goods	225.0	194.7	202.2	203.8	3.9	0.8
Nonmanufacturing	1,855.9	1,772.8	1,831.0	1,870.5	3.3	2.2
Construction	139.5	86.5	89.2	96.8	3.1	8.5
Trans., Comm. & Utilities	160.6	139.4	138.5	137.2	- 0.6	- 1.0
Wholesale Trade	170.4	154.6	170.0	174.3	10.0	2.5
Retail Trade	590.9	556.9	573.6	589.0	3.0	2.7
Finance, Ins. & Real Estate	154.5	151.4	153.8	158.2	1.6	2.8
Services	626.7	675.0	696.5	705.6	3.2	1.3
Mining	13.2	9.0	9.4	9.5	4.4	1.1
Government	621.0	569.8	566.5	570.7	- 0.6	0.7

Source: Michigan Employment Security Commission.

Table 8

Michigan Labor Market Unemployment Rates, 1982-1984[1] (Percent)

Labor Market	1982	1983	1984
Ann Arbor	9.9	9.5	7.0
Battle Creek	16.0	14.4	11.1
Benton Harbor	16.3	15.5	12.4
Detroit	15.9	14.6	10.9
Flint	21.1	16.4	12.2
Grand Rapids	11.8	11.5	9.0
Kalamazoo	10.6	9.5	7.6
Lansing-East Lansing	11.8	9.7	10.1
Muskegon	17.7	16.8	11.9
Saginaw-Bay City-Midland	16.0	14.8	13.3
Upper Peninsula	18.9	17.4	14.8

[1] Employment and unemployment data for these Metropolitan Statistical Areas (MSAs) are available in appendix table C-7.

Source: Michigan Employment Security Commission.

As the number unemployed declined in 1984, so did the number of workers claiming regular unemployment benefits in Michigan. However, as shown in Table 9, the reduced number of claimants was partly due to a sharp drop in the percent of unemployed people receiving benefits from the first half of 1982 to the last half of 1984. Since the peak in the average number of unemployed in the first six months of 1983, the percentage of unemployed persons receiving benefits has fallen from 27.9 to 19.8 percent. This occurred as many workers exhausted both their regular unemployment benefits and extended benefits covering up to thirteen more weeks. Additional aid in the form of federal supplemental benefits was also available until June 1983, when the federal program ended for Michigan's unemployed.

Table 9

Michigan Unemployed and Regular Unemployment Beneficiaries, 1982-1984 (Thousands)

Period	Average Number Unemployed	Average Claiming U.I. Benefits[1]	
		Number	% of Unemployed
1982			
Jan.-June	660.8	253.5	38.4
July-Dec.	661.4	206.5	31.2
1983			
Jan.-June	682.3	190.4	27.9
July-Dec.	533.7	98.1	18.4
1984			
Jan.-June	514.8	112.3	21.8
July-Dec.	460.6	91.3	19.8

[1] Data reflects average week for insured unemployment and does not include extended or supplemental federal benefits.

Source: Michigan Employment Security Commission.

Labor market statistics for Michigan are compared with the seven-county Detroit Primary Metropolitan Statistical Area (PMSA) in Table 10. In 1983, the Detroit PMSA experienced a 1.3 percentage point reduction in its unemployment rate. This improvement was one-tenth of a percentage point better than the reduction that occurred in the rest of the state. Outstate, the improvement was a result of employment gains being able to supply work for the increased number of people in the labor force. In the Detroit area, the improvement in the unemployment rate was the result of both more people working and a reduction in the labor force. In 1984, Detroit had larger employment growth than the rest of the state, 5.6 percent vs. 4.9 percent. In number of people working, Detroit added 96,900 in 1984

Table 10

Detroit PMSA and Balance of State Employment, 1982-1984
(Thousands)

Area	Labor Force	Employment	Unemployment	Unemployment Rate
1982				
Detroit PMSA	2,044.0	1,718.3	325.7	15.9
All Others	2,233.0	1,897.7	335.3	15.0
Michigan	4,277.0	3,616.0	661.0	15.5
1983				
Detroit PMSA	2,039.2	1,742.0	297.2	14.6
All Others	2,247.8	1,937.0	310.8	13.8
Michigan	4,287.0	3,679.0	608.0	14.2
1984				
Detroit PMSA	2,064.3	1,838.9	225.0	10.9
All Others	2,294.7	2,032.1	263.0	11.5
Michigan	4,359.0	3,871.0	488.0	11.2

Source: Michigan Employment Security Commission.

compared to 95,100 in the rest of the state. The growth in employment in Detroit and outstate continued to attract new people into the labor force. In Detroit, the rate of employment growth in 1984 was over four times the growth in the labor force. This resulted in the Detroit PMSA experiencing a 3.7 percentage point decline in its unemployment rate. In the rest of the state, employment grew at just over twice the rate of the labor force, resulting in a 2.3 percentage point decline in the unemployment rate.

Wage and Salary Employment

Wage and salary employment, another measure of employment which excludes agricultural and self-employed workers, continued to rebound from the 1979-1982 recession. The 1984 level of wage and salary employment of 3,343,300 was up 3.7 percent from 1983. But when compared to the peak reached in 1979, the 1984 level is still over 8 percent or 293,700 jobs lower. Michigan's growth rate in wage and salary employment since the trough of the recession has exceeded the growth rate in the other East North Central states by 67 percent. During the recovery, wage and salary employment in Michigan grew at about the same rate as U.S. wage and salary employment. In manufacturing, the other states in the region experienced growth just above the country as a whole. Michigan manufacturing employment rebounded at over twice the rate of the region and the entire country. The sections and tables that follow present a detailed examination of employment in the manufacturing, nonmanufacturing and government sectors of the Michigan economy.

Manufacturing Employment

At the end of the recession in late 1982, manufacturing employment in Michigan was down over 25 percent from the 1978 peak. This was a direct result of the real decrease in personal consumption expenditures on durable goods, particularly automobiles and parts, and the negligible growth in real business investment on equipment that occurred during the recession.

With continued strong growth in real economic activity in 1984, manufacturing employment grew 7.4 percent to a 1984 level of 945,800 (see Table 11). Employment in durable goods producing industries was up 8.4 percent in 1984. This growth was led by furniture and fixture producers, where employment was up 14.4 percent, and by fabricated metal products producers, where employment increased 13.9 percent or 14,300 jobs.

The continued strong level of automobile sales resulted in a 20,000 increase in motor vehicle manufacturing employment on top of the 13,200 increase of 1983. Motor vehicles accounted for one-third of the total growth in durable goods manufacturing employment in 1984. However, because of continuing efforts by the auto companies to automate production and remain competitive in the market, employment levels are not expected to return to the levels of the late 1970s. In the nondurable goods producing sector, textiles and apparel employment, which in Michigan is textiles for automobile interiors, was up 8.0 percent.

Table 11

Michigan Manufacturing Industry Employment, 1982-1984
(Thousands)

Industry	1982	1983	1984	Percent Change 1983-84
Total Manufacturing	876.9	880.5	945.8	7.4
Durable Goods	684.5	685.8	743.7	8.4
Lumber, Wood	9.7	10.8	11.8	9.3
Furniture, Fixtures	21.6	22.2	25.4	14.4
Primary Metals	51.1	49.5	52.7	6.5
Fabricated Metals	101.7	102.9	117.2	13.9
Nonelectric Machinery	132.1	116.9	128.2	9.7
Electric Machinery	30.4	30.6	33.4	9.2
Motor Vehicles	286.5	299.7	319.7	6.8
Other Transportation	16.2	17.9	18.5	3.4
Other Durables	35.2	35.3	36.6	3.7
Nondurable Goods	192.4	194.7	202.2	3.9
Food and Kindred Products	46.1	45.4	45.7	0.7
Textiles, Apparel	17.3	18.8	20.3	8.0
Paper	20.4	20.4	20.8	2.0
Printing, Publishing	32.7	34.0	35.7	5.0
Chemicals, Petroleum	44.9	42.8	42.3	- 1.2
Other Nondurables	31.0	33.3	37.4	12.3

Source: Michigan Employment Security Commission.

Nonmanufacturing Employment

Nonmanufacturing employment did not suffer as great of a loss during the recession as manufacturing, thus its growth in 1984 was not as dramatic (see Table 12). Wholesale trade employment had the highest rate of growth at 10 percent. Service employment, the largest nonmanufacturing sector on the basis of employment, had the largest absolute growth among these industries with employment increasing 21,500. Retail trade, the second largest nonmanufacturing sector, increased its employment level by 16,700. Together these three industries accounted for 92 percent of the growth in nonmanufacturing employment. In contrast, the current level of construction employment is only two-thirds that attained in the late 1970s. These employment changes reflect the national trend of the continued movement of the economy away from one that concentrates on goods production towards one dominated by the service sector.

Table 12

Michigan Nonmanufacturing Industry Employment, 1982-1984
(Thousands)

Industry	1982	1983	1984	Percent Change 1983-84
Total Nonmanufacturing	1,738.6	1,772.8	1,831.0	3.3
Construction	89.5	86.5	89.2	3.1
Mining	10.4	9.0	9.4	4.4
Transp., Comm. & Util.	143.3	139.4	138.5	- 0.6
Wholesale Trade	150.7	154.6	170.0	10.0
Retail Trade	542.6	556.9	573.6	3.0
Finance, Insurance & Real Estate	151.9	151.4	153.8	1.6
Services	650.3	675.0	696.5	3.2

Source: Michigan Employment Security Commission.

Government Employment

Public employment comprised 17 percent of the wage and salary employment in the state in 1984. The number of workers employed by all levels of government--federal, state and local--declined by 0.6 percent in 1984 to 566,500 employees (see Table 13).

Local government employment, the largest group of public employees, declined 0.4 percent in 1984 to 372,100. State government employment, over half of which is in the state higher education system, dropped the most both in absolute numbers (2,300) and in percentage terms (1.6%) in 1984. These reductions continue trends begun in 1980. Federal government employment in Michigan while increasing 0.5 percent in 1984, has remained rather stable since 1970. In 1984, the federal government had 56,200 employees in Michigan.

Table 13

Michigan Government Employment, 1982-1984
(Thousands)

Sector	1982	1983	1984	% Change 1983-84
Government	577.8	569.8	566.5	- 0.6
Federal	55.9	55.9	56.2	0.5
State[1]	142.2	140.5	138.2	- 1.6
Local	379.7	373.4	372.1	- 0.4

[1] In addition to classified civil service employees, state government employment includes employees of state-supported colleges and universities, the legislature and the courts.

Source: Michigan Employment Security Commission.

Employment Outlook

The labor market continues to improve in 1985. Total employment for the year is expected to increase 2.8 percent to a level of 3,980,000. This employment level will just surpass the previous peak achieved in 1979 (see Table 7). The number of persons unemployed is expected to drop by 37,000 and the labor force will increase by 72,000 (1.7%). The result will be a one percentage point decline in the unemployment rate to 10.2 percent for 1985, a level 2.9 percentage points above the projected U.S. unemployment rate.

Employment

Wage and salary employment growth will increase 1.8 percent reaching a 1985 average level of 3,403,700. Manufacturing employment should experience the same growth rate with durable goods providing most of the new jobs. Retail trade and services, the two largest components of nonmanufacturing employment, will provide almost five out of every eight new private nonmanufacturing jobs in 1985. Overall, nonmanufacturing employment is expected to rise by 39,500 jobs surpassing the 1979 peak.

PERSONAL INCOME

Strong Personal Income Growth in 1984

Michigan personal income grew 9.5 percent in 1984 to $114 billion, following a 6.2 percent growth rate in 1983 (see Table 14). Personal income, the best single measure of state economic activity, includes income from salaries and wages, proprietors' income, interest, dividends and government transfer payments to individuals. Real personal income growth in 1984, the second year of the economic recovery which began in late 1982, was 5.8 percent compared to growth of 3.3 percent in 1983. This rate of growth in real personal income equals that experienced in the second year of recovery from the 1973-1975 recession.

Table 14

Michigan Personal Income, 1970-1984
(Millions)

Year	Michigan Personal Income (Current Dollars)	Percent Change	Real Michigan Personal Income (1967 Dollars)	Percent Change
1970	$ 35,976	3.2	$30,644	- 2.8
1971	39,068	8.6	32,102	4.8
1972	43,282	10.8	34,296	6.8
1973	48,382	11.8	35,972	4.9
1974	51,740	6.9	34,702	- 3.5
1975	54,540	5.4	34,024	- 2.0
1976	61,324	12.4	36,308	6.7
1977	69,291	13.0	38,410	5.8
1978	77,532	11.9	39,945	4.0
1979	85,448	10.2	39,053	- 2.2
1980	90,681	6.1	35,772	- 8.4
1981	96,251	6.1	34,735	- 2.9
1982	97,974	1.8	33,983	- 2.2
1983	104,071	6.2	35,100	3.3
1984	113,956	9.5	37,125	5.8

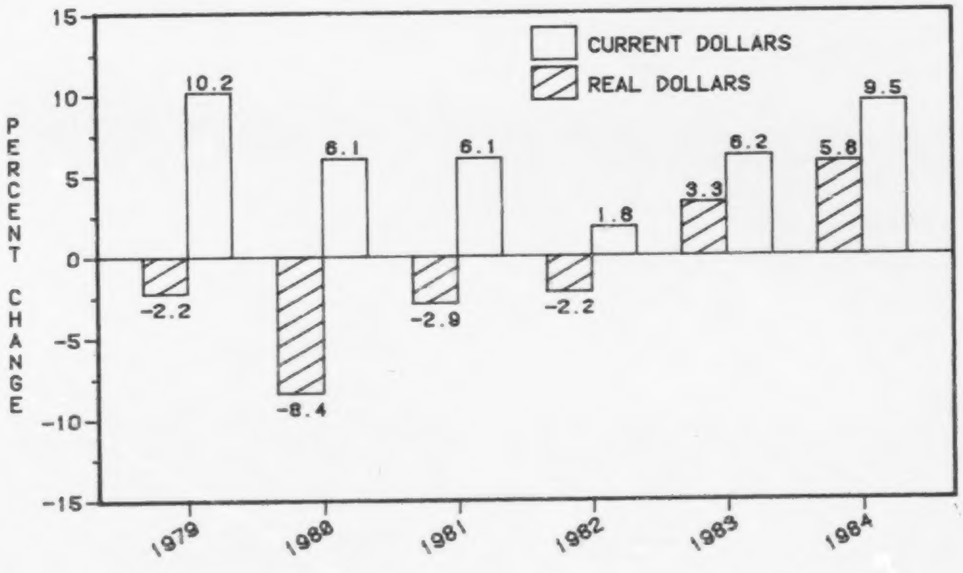
Source: U.S. Department of Commerce, Bureau of Economic Analysis; Michigan Department of Management and Budget.

As Table 14 shows, the rate of growth in Michigan's personal income, in current dollars since 1970, has ranged from 1.8 percent in 1982 to 13 percent in 1977. The increase of only 1.8 percent in 1982 was the lowest rate of growth since 1961, when personal income actually declined by 0.3 percent. However, the increases in personal income during the recession years of 1974-1975 and 1979-1982 were primarily due to inflation. Adjusted to inflation, real Michigan personal income fell in six out of the past eleven years. The combination of an economic recession and high inflation in 1980 reduced real personal income by 8.4 percent.

The severity of the recession in the early 1980s in Michigan is evident in Chart 3 which shows the four consecutive years of falling real personal income from 1979 to 1982. The strength of the current economic recovery is reflected in the 3.3 and 5.8 percent real rates of growth in 1983 and 1984, respectively. Real personal income in 1984 was still 4.9 percent below the level of income Michigan residents received in 1979.

Chart 3

Percent Change in Michigan Personal Income, 1979-1984



Components of Personal Income

The major component of Michigan personal income is wages and salaries, which accounted for more than 60 percent of total personal income in 1984. As Table 15 shows, the share of wages and salaries in total personal income increased in 1984 to 61.1 percent from 60.7 percent in 1983. Property income (interest, dividends, and rent) comprised 17 percent of personal income in 1984, while transfer income (including social security, unemployment insurance and supplemental income benefits) accounted for approximately 15 percent. In addition, 7.9 percent of Michigan personal income is derived from other labor income, including employer-provided fringe benefits, and 2.8 percent is derived from proprietors' income.

Table 15

Components of Michigan Personal Income, 1983 and 1984

Income Source	Percent of Total	
	1983	1984
Wages & Salaries	60.7	61.1
Other Labor Income	7.4	7.9
Proprietors' Income	2.8	2.8
Property Income	16.3	17.0
Transfer Payments	16.2	14.9
Residents Working Out-of-State	0.5	0.5
Social Security Contributions	- 3.9	- 4.2
Total	100.0	100.0

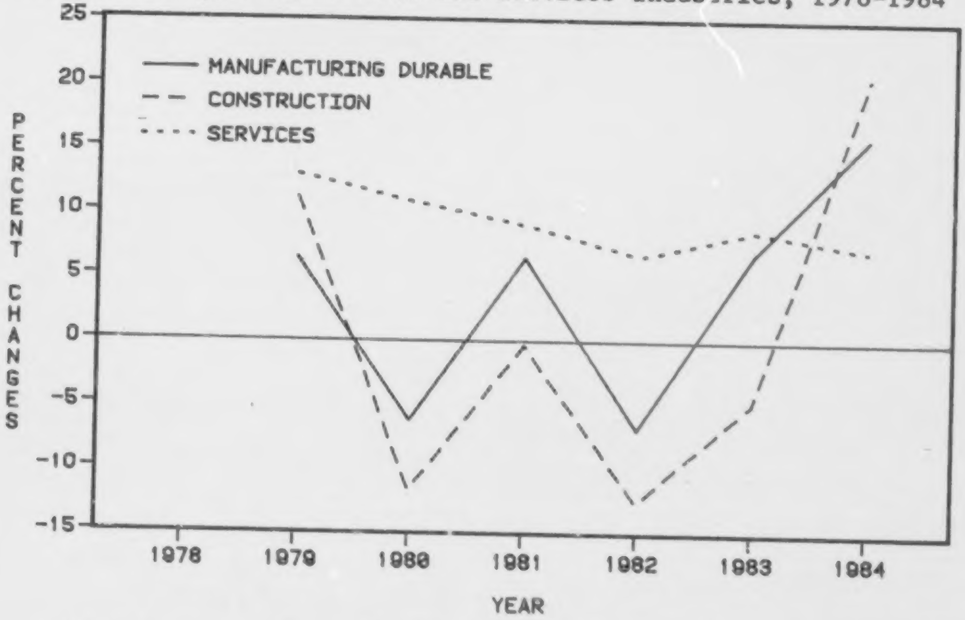
Source: Michigan Department of Management and Budget.

Sources of Income Growth in 1984

Personal income from all sources increased a strong 9.5 percent in 1984, as compared to a 6.2 percent increase in 1983. As shown in Table 16, wages and salaries earned in manufacturing increased 16 percent to $28 billion in 1984, following a 6.9 percent increase in 1983 and a 6.8 percent decrease in 1982. Wages and salaries derived from manufacturing tend to be very cyclical because this sector is dominated by firms in durable goods industries, including the motor vehicle, furniture and appliance industries. In 1984, 33.1 percent of Michigan wages and salaries were earned in durable goods manufacturing firms. As Chart 4 shows, rate of change in wages and salaries derived from durable manufacturing fluctuated widely over the past six years, reflecting the economic cycle.

Chart 4

Percent Change in Wages and Salaries Derived from Manufacturing, Construction and Services Industries, 1978-1984



In the nonmanufacturing industries, the strongest wage and salary growth in 1984 occurred in wholesale trade and mining with growth rates exceeding 12 percent. One of the sectors experiencing the lowest rate of growth in wages and salaries was government, with an increase of only 4.5 percent.

A nonmanufacturing industry which is highly cyclical is the construction industry. Wages and salaries in this industry declined continually from 1979 to 1983 because construction activity was depressed by historically high mortgage rates and the decline in real personal income. Because of new, creative financing programs and resumed growth in personal income, new construction increased and wages and salaries from construction activity rebounded in 1984 (see Chart 4).

As Chart 4 shows, the service industry has experienced one of the steadiest growth rates of any business sector in Michigan's economy. Despite the recession from 1979 to 1982, income derived from service industries continued to increase without interruption. The rate of increase was close to the inflation rate during the recession and above the inflation rate after the recession. Wages and salaries from wholesale and retail trade increased 15.2 and 6.1 percent, respectively, in 1984. The rate of growth in wages and salaries in the finance, insurance and real estate sector slowed to 5.5 percent in 1984, down from a 6.2 percent growth rate in 1983. Wages and salaries earned in mining rose a strong 12.8 percent in 1984 following a 9.8 percent decline in 1983.

Along with wages and salaries, Michigan personal income includes proprietors' income for the self-employed, property income (interest, dividends and rent), transfer payments and other labor income including employee benefits. In 1984, property income increased by 14.2 percent, substantially higher than the 4.6 percent growth in 1983. This large increase was due to higher interest earnings and increased profits in 1984. Nationally, personal interest income increased 15.3 percent in 1984 as short-term interest rates increased about 100 basis points.

Transfer payments accounted for 14.9 percent of Michigan personal income in 1984. Government transfer payments are paid to individuals who have lost their jobs due to layoffs or plant closings, who are unable to work due to health problems or child-care responsibilities, or who are retired. As Table 16 shows, transfer payments only increased by 0.4 percent in 1984, following a 5.6 percent increase in 1983. The total amount of unemployment benefits fell by over 50 percent in 1984 due to strong economic growth and the exhaustion of benefits by some unemployed individuals. Excluding unemployment benefits, transfer payments rose 5.9 percent in 1984.

State and Regional Comparison

Michigan's personal income grew at approximately the same rate as the U.S. average in 1984 (9.5% vs. 9.7%); the increase in personal income for both the U.S. and Michigan was 6.1 percent in 1983. Table 17 provides comparisons of personal income levels and growth rates for selected states and regions for 1982-1984.

All regions did not share equally in income gains between 1983 and 1984. The New England, Great Lakes, Plains, and Far West regions experienced gains in personal income at rates

Table 17

Personal Income in Selected States and Regions, 1982-1984
(Seasonally Adjusted Annual Rate in Billions)

	1982	1983	1984	Percent Change 1982-83	Percent Change 1983-84
State					
California	$ 312	$ 334	$ 367	7.1	9.9
New York	214	229	251	7.0	9.6
Texas	174	184	202	5.3	9.8
Illinois	138	142	158	3.3	11.3
Pennsylvania	130	136	147	4.8	8.1
Ohio	115	121	132	5.0	9.1
Florida	114	124	138	8.2	11.3
Michigan	98	104	114	6.1	9.5
New Jersey	98	105	115	7.9	9.5
North Carolina	55	60	66	8.1	10.0
Indiana	55	57	65	4.5	14.0
Wisconsin	51	54	59	5.0	9.2
Region					
New England	151	162	180	7.8	11.1
Mideast	511	544	592	6.6	8.8
Great Lakes	457	478	528	4.7	10.5
Plains	189	197	219	4.7	11.2
Southeast	525	562	594	7.0	5.7
Southwest	253	265	290	4.9	9.4
Rocky Mountain	75	78	85	4.8	9.0
Far West	399	426	468	6.7	9.8
United States	2,576	2,734	3,000	6.1	9.7

Source: *Survey of Current Business*, U.S. Department of Commerce, Bureau of Economic Analysis.

above the national average. The Plains and New England regions experienced strong increases in personal income in excess of 11 percent. The lowest growth rate in 1984 occurred in the Southeast region, which also experienced the lowest rate of growth in personal income from 1982 to 1984. The Mideast, Southwest and Rocky Mountain regions also failed to keep pace with the national average in 1984.

The New England region had the greatest growth in personal income between 1982 and 1984. Although the growth of employment in manufacturing industries in the New England region in 1984 was not as high as the nation as a whole, every state in this region reversed the decline in 1983. New Hampshire and Rhode Island actually gained employment in manufacturing at a rate higher than the national average. Strong gains in housing starts and construction also contributed to income growth in the region in 1984. Regional housing starts were up 20.4 percent in 1984, compared to a 2.8 percent increase nationwide.

The Southwest region experienced the greatest gain in personal income during the recession, but the region's gain was below the national average in both 1983 and 1984. This weak performance is partly due to the effects of lower worldwide oil prices, which left oil companies with excess capacity, growing oil inventories and intensified competition. In addition, manufacturing employment in the Southwest dropped 7 percent in 1983, compared to a loss of 2.5 percent for total U.S. manufacturing employment. Although there were some gains in employment within the region in 1984, the overall regional gain was still below the national average.

The Great Lakes region had a 10.5 percent increase in personal income in 1984, which exceeded the U.S. average of 9.7 percent. The growth rate in Michigan personal income between 1982 and 1984 of 16.3 percent exceeded the growth rate of 15.5 percent for the Great Lakes region. Payroll increases in both durables and nondurables manufacturing have led the Michigan recovery, as manufacturing employment increased 9.7 percent in 1983 and 6.7 percent in 1984.

Both the severity of the recent recession and the strength of the current recovery are evident in changes in Michigan per capita income relative to changes in other states since 1979. The growth rate in Michigan per capita personal income exceeded both the U.S. and Great Lakes growth rates over the past two years. Michigan ranked 11th in per capita income in 1979 with a level of $9,239, 6.8 percent higher that the national average of $8,651. In 1982, at the trough of the recession, Michigan per capita income was $10,751, 3 percent less than the U.S. average and 11.7 percent less than real income in Michigan in 1979. As a result, Michigan's rank in terms of per capita income dropped to 27th among the states.

In 1984, Michigan's per capita income increased to $12,641, just 0.6 percent below the U.S. average, and Michigan's rank improved to 21st. Even with this growth, Michigan real per capita income was still 3 percent less than the 1979 level.

Chart 5 compares the growth in real personal income in Michigan and the U.S. since 1970. Using 1970 as the base for comparison, the chart shows that Michigan's real personal income grew faster than U.S. income up to 1973. But in the recession years of 1974-75, real personal income growth in Michigan dropped below the national average. The recovery after 1976 quickly returned Michigan to a growth rate above the U.S. level. With the beginning of the national recession in 1979, Michigan's real personal income fell dramatically relative to U.S. income and the gap between the two growth rates widened sharply. The continued state economic growth in 1983 and 1984 is beginning to close this gap.

Chart 5

Real Personal Income Growth, Michigan and the U.S., 1970-1984
(1970=100)

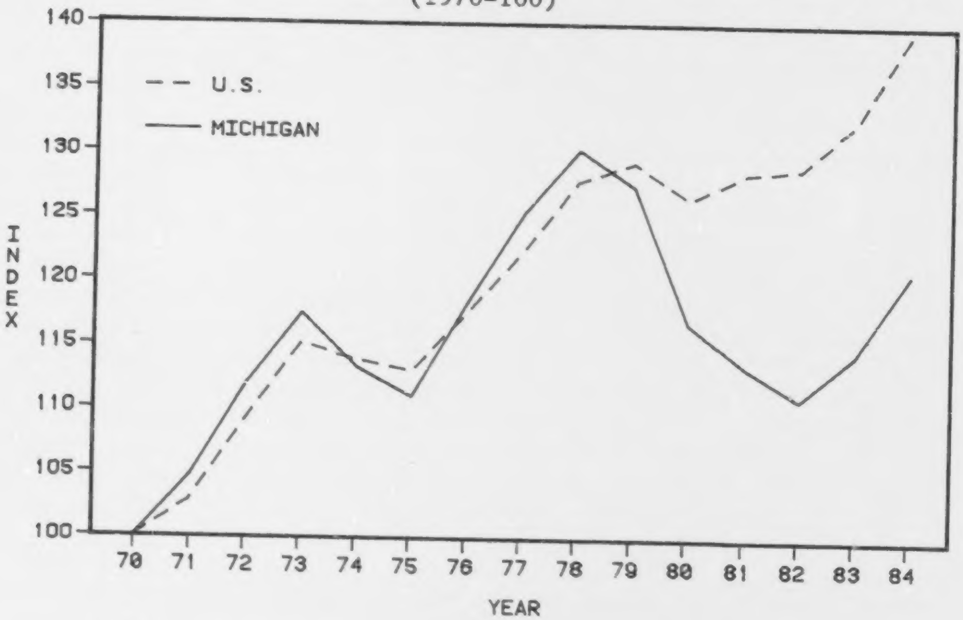


Table 18 presents per capita personal income data for selected states and regions. Per capita income in the Plains region increased by an estimated 11.5 percent in 1984, as compared with only 4.3 percent in 1983. The Great Lakes and New England regions also experienced substantial increases in per capita income above the national rate. Nevertheless, the New

Table 18

Per Capita Personal Income in Selected States and Regions, 1982-1984

	1982	1983	1984	Percent Change	
				1982-83	1983-84
State					
California	$12,617	$13,251	$14,321	5.0	8.1
New York	12,204	12,993	14,094	6.5	8.5
Texas	11,380	11,646	11,908	2.3	2.2
Illinois	12,027	12,422	13,676	3.3	10.1
Pennsylvania	10,928	11,454	12,320	4.8	7.6
Ohio	10,660	11,226	12,257	5.3	9.2
Florida	10,929	11,526	12,659	5.5	9.8
Michigan	10,751	11,490	12,641	6.9	10.1
New Jersey	13,164	14,128	15,434	7.3	9.2
North Carolina	9,148	9,796	10,657	7.1	8.8
Indiana	10,020	10,490	11,606	4.7	10.6
Wisconsin	10,774	11,308	12,326	5.0	9.0
Region					
New England	12,119	13,008	14,208	7.3	9.2
Mideast	12,056	12,799	13,859	6.2	8.3
Great Lakes	10,985	11,526	12,657	4.9	9.8
Plains	10,874	11,339	12,648	4.3	11.5
Southeast	9,657	10,209	11,117	5.7	8.9
Southwest	11,075	11,295	12,257	2.0	8.5
Rocky Mountain	10,783	11,062	11,985	2.6	8.3
Far West	11,754	12,326	13,305	4.9	7.9
United States	11,113	11,682	12,723	5.1	8.9

Source: *Survey of Current Business*, U.S. Department of Commerce, Bureau of Economic Analysis, July 1985.

England region continued to have the highest per capita income ($14,200) among the regions in 1984 followed by the Mideast region ($13,860), Far West region ($13,305), the Great Lakes region ($12,660), and the Plains region ($12,650). Although the Southeast region has been steadily gaining personal income, the influx of population to this region has driven the per capita income down to the lowest among the regions ($11,117).

Outlook

For the year, personal income is projected to increase 7.1 percent to $122.1 billion, as strong automobile sales continue. According to preliminary estimates, Michigan personal income increased at an average annual growth rate of 6.3 percent in the first half of 1985. In real terms, Michigan personal income is expected to increase 3.5 percent, compared to the 5.8 percent increase in 1984. Wages and salaries are projected to increase 6.5 percent in 1985, with labor income in durable goods manufacturing rising 5.2 percent. Nonmanufacturing wages and salaries are forecast to rise 8.6 percent, with strong growth occurring in retail trade, services and construction.

Lower interest rates and a reduced saving rate have slowed the growth in income from property (interest, dividends and rent) from 14.2 percent in 1984 to an estimated 8.4 percent in 1985. Transfer payments are projected to rise 6.3 percent in 1985, as increased social security benefits offset continued reductions in the total amount of unemployment payments.

PRICES

Moderate Inflation in 1984

Inflation, as measured by the Detroit Consumer Price Index (CPI) for urban consumers, remained at a moderate level in 1984. The increase of 3.5 percent was greater than 2.8 percent recorded the previous year, but was still the second lowest increase in the Detroit CPI since 1967. The U.S. CPI increased 4.3 percent in 1984. Although the inflation rate is showing the usual pattern of accelerating with the economic recovery, it is at a lower level than at this point in the previous recovery cycle when the Detroit CPI advanced 5.4 percent in 1976.

The factors that contributed to the moderate increase in the Detroit and United States CPIs included plentiful supplies of food and energy and relatively moderate growth in U.S. hourly earnings of 3.3 percent in 1984. The strength of the dollar helped hold down price increases both by increasing the supply of lower priced imports and by restraining the ability of domestic manufacturers to increase prices. Generally, increases in the money supply since late 1979 have been moderate, although uneven, thus helping to restrain inflation.

Finally, inflationary expectations, which encourage buying in advance, were broken by three years of moderate price increases--each under 5 percent. Contributing to the 3.5 percent increase in the Detroit CPI was an increase of 2.2 percent in food prices, which compared to a 0.1 percent decline in 1983 (see Table 19). This increase reflected a rise in farm prices late in 1983 and early in 1984, as well as increases in the cost of handling and distributing food. The farm price increase occurred, in part, because of the federal "Payment-in-Kind" (PIK) program, as farm prices actually declined for most commodities later in 1984. The largest price increases occurred in the fruit/vegetable and cereal/bakery products categories.

Also contributing to the increase in consumer prices were higher transportation prices, where a small decline in gasoline prices was more than offset by increases in automobile prices, automobile parts prices, and insurance. The cost of public transportation increased sharply, although at a slightly lower rate than in 1983. The cost of medical care also moved up sharply, increasing much more rapidly than the previous year; however, the rate of increase slowed as the year progressed.

Table 19

Detroit Consumer Price Index, 1983, 1984 and 1985 Forecast
(Percent Change)

Group	1983 Annual Average	1984		1985 Forecast	
		Dec. '83 to Dec. '84	Annual Average	Dec. '84 to Dec. '85	Annual Average
All Items	2.8	3.0	3.5	3.9	3.5
Food	- 0.1	4.1	2.2	2.8	2.5
Housing	4.3	2.0	2.8	4.3	3.8
Homeowners' Costs[1]	1.6	2.8	1.8	5.2	5.1
Fuels	10.2	- 0.8	2.9	2.5	2.1
Household Furnishings & Operations	2.0	- 0.7	- 0.2	2.0	1.8
Apparel and Upkeep	2.7	0.9	- 0.2	3.0	2.7
Transportation	0.7	4.3	5.2	2.6	2.4
Private	0.2	4.2	4.9	2.5	2.3
Gasoline[2]	- 3.3	- 2.5	- 1.6	- 1.9	- 2.3
Public	12.0	6.9	10.6	6.0	6.0
Medical Care	5.5	5.2	10.3	5.8	5.8
Entertainment	4.3	0.4	0.6	5.5	4.5
Other Goods and Services	11.1	3.2	4.1	6.0	5.5

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[1] For 1983, homeowners' costs are measured from December to December.

[2] U.S. Consumer Price Index.

Source: U.S. Department of Labor, Bureau of Labor Statistics and Michigan Department of Management and Budget.

A slowdown in the rate of inflation in housing prices also contributed to the lower inflation rate in 1984. Major factors holding down housing costs were a drop in oil and bottled gas prices and a relatively small increase in homeowners' costs. While the homeowners' costs component of the CPI is new and still has some apparent sampling problems, it does reflect the good stock of reasonably priced housing available in Michigan. The index shows that household furnishings and operations, as well as apparel and upkeep, declined in price by 0.2 percent.

Entertainment and other goods and services categories advanced in price at a much slower rate in 1984 than in 1983. These categories were influenced both by lower rates of increase in labor costs and by increased competition.

Commodity Price Stability Continues in 1985

Moderate price increases are continuing during 1985. As shown in Table 19, the Detroit CPI is estimated to rise by 3.5 percent in 1985, essentially the same rate as last year. The monthly pattern of the increase is a rise in the early months, partially reflecting winter weather conditions, followed by a slowing in the rate of inflation. The inflation rate is expected to rise again toward the end of the year, reflecting the effect of a somewhat stronger economy in the second half of the year. The inflation outlook reflects continued plentiful supplies of food and energy. Wage increases are continuing at moderate levels, just above 4 percent, keeping cost pressures low. As the recovery nears the end of its third year, productivity gains are expected to be quite small, converting most of the wage increases into higher costs of production. The single-digit inflation rates of the last three years have reduced inflationary expectations, helping to restrain price increases in the immediate future. The dollar is weakening, but not so rapidly and so greatly as to lead to immediate price increases for imported oil, automobiles and other commodities.

During 1985 food prices have been slightly higher than in 1984 largely due to higher processing costs. Housing prices in Michigan are also rising, reflecting the improved economy. Transportation costs are rising more slowly as price increases in the automotive category remain low, in part, because of increased imports. Gasoline prices continue to fall but by only a small amount. The cost of medical care is rising at a slower rate than in 1984, reflecting both the slowing trend begun late last year and cost-control efforts by the federal government.

Table 16

Michigan Personal Income, 1983, 1984 and 1985 Forecast
(Millions)

Source	1983	1984	1985 Forecast	Percent Change 1983-84	Percent Change 1984-85
Wage & Salary Disbursements/Place of Work	$ 63,191	$ 69,645	$ 74,152	10.2	6.5
Farms	317	352	365	11.0	3.6
Manufacturing	24,145	28,002	29,362	16.0	4.9
Durables	19,639	23,030	24,218	17.3	5.2
Nondurables	4,506	4,971	5,144	10.3	3.5
Nonmanufacturing	28,584	30,502	33,139	6.7	8.6
Construction	1,947	2,000	2,250	2.7	12.5
Transportation, Communication & Utilities	3,654	3,862	3,940	5.7	2.0
Wholesale Trade	3,574	4,119	4,486	15.2	8.9
Retail Trade	5,644	5,990	6,576	6.1	9.8
Finance, Insurance & Real Estate	2,757	2,908	3,167	5.5	8.9
Services	10,597	11,362	12,450	7.2	9.6
Mining	231	261	270	12.8	3.5
Government	10,197	10,654	11,143	4.5	4.6
Other Industries	127	133	143	4.9	7.5
Other Labor Income	7,752	8,986	9,916	15.9	10.3
Proprietors' Income	2,956	3,171	3,649	7.3	15.1
Total Labor & Proprietors' Income/Place of Work	73,899	81,802	87,717	10.7	7.2
Less: Contributions for Social Insurance	4,120	4,643	5,179	12.7	11.6
Plus: Residence Adjustment	507	549	583	8.3	6.1
Net Labor & Proprietors' Income/Place of Resid.	70,286	77,709	83,120	10.6	7.0
Dividends, Interest & Rent	16,923	19,323	20,950	14.2	8.4
Transfer Payments	16,863	16,923	17,990	0.4	6.3
Total Personal Income	$104,071	$113,956	$122,060	9.5	7.1
Real Personal Income (1967 Dollars)	$ 35,100	$ 37,125	$ 38,400	5.8	3.5

Source: U.S. Department of Commerce, Bureau of Economic Analysis and Michigan Department of Management and Budget.

In summary, as a result of moderate inflation in 1985, Michigan residents continue to experience rising real incomes. However, because some of this moderation in inflation arises from intensified import competition, slower employment growth in Michigan industries will lower the expected rate of growth in real income next year.

Beyond 1985, the inflation outlook becomes more clouded. A weakening of the dollar, combined with a slightly stronger economy in the second half of 1985, is expected to raise inflation in 1986 to 5.5 percent. The threat to continued moderate inflation over the next few years comes from uncertainty over the future value of the dollar and the size of the federal deficit. If the annual federal deficit remains large, it will become more difficult to finance without upward pressure on domestic interest rates. However, the high interest rates resulting from the deficit financing can create deflationary pressure and lead to a recession. To prevent this, the Federal Reserve may have to facilitate the financing of the deficit in future years. Such an action could easily rekindle inflation before bringing about a full economic recovery. At the present time, growth of the federal budget deficit creates the possibility of either inflationary or deflationary forces developing later in the decade, depending upon how the deficit problem is handled.

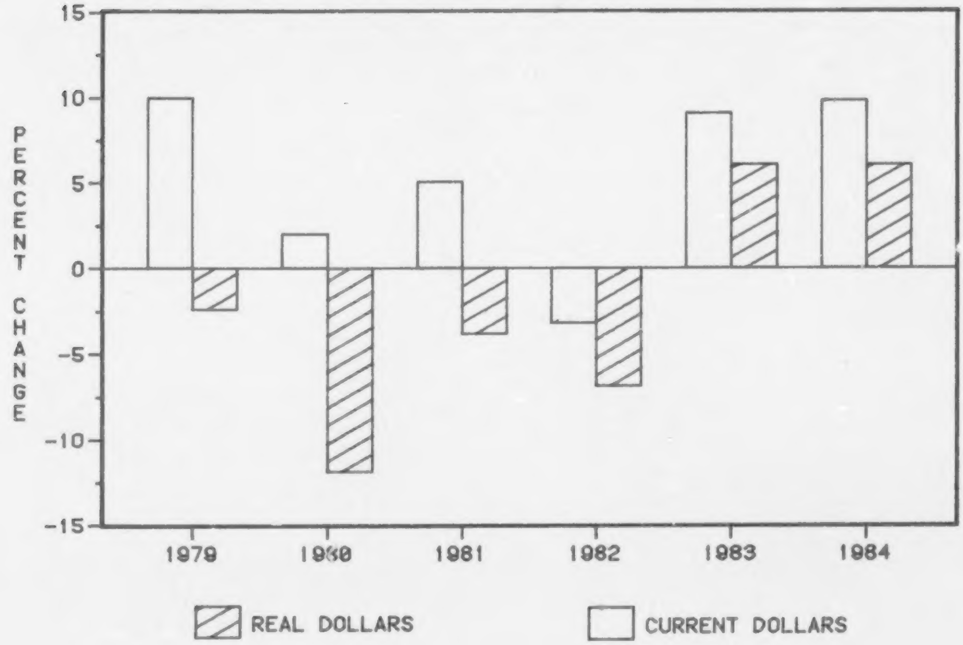
CONSUMER SPENDING

Michigan Retail Sales in 1984

Retail sales and consumer spending in Michigan increased substantially in 1984 for the second consecutive year. Retail sales reached $47 billion, a 9.8 percent increase over the previous year, following a strong 9.1 percent increase in 1983 (see Chart 6). The year-end total for 1984 represents an increase of 19.9 percent over the level of Michigan retail sales reported in the 1982 Census of Retail Trade. The retail sales gain in 1984 was led by an 18 percent increase in sales of durable goods, such as automobiles, furniture and household appliances. Sales of nondurable goods increased only 5.9 percent. In 1984 durable goods accounted for 35.1 percent of total Michigan retail sales. The cyclical nature of durable

Chart 6

Percent Change in Michigan Retail Sales, 1979-1984



goods sales is evident when the 1984 ratio is compared with the ratio of 27.9 percent for durable goods sales in 1980. Retail sales in the Detroit metropolitan area (Lapeer, Livingston, Macomb, Oakland, St. Clair, and Wayne Counties) were $23.4 billion in 1984, 9 percent greater than the 1982 total of $19.4 billion. Detroit area retail sales comprised 49.8 percent of all Michigan retail sales in 1984, down slightly from a level of 50.2 percent in 1983. This parallels a slight decline in the Detroit area's population in 1984. It also reflects stronger retail growth in selected out-state areas, as indicated by department store sales in 1984. Detroit area department store sales rose 9.6 percent in 1984, while comparable sales figures for the Flint, Grand Rapids, and Lansing-East Lansing metropolitan areas rose 12.9 percent, 13.2 percent, and 9.3 percent, respectively.

When statewide figures are adjusted for inflation, however, a different picture emerges, as is clear in Chart 6. Michigan retail sales in constant dollars fell continually from $17.6 billion in 1977 to $13.6 billion in 1982 before resuming real growth in 1983. The sharp drop in retail sales between 1977 and 1982 (a decline of 22.5 percent in constant dollars) reflects

Table 20

Michigan Sales Tax Collections, 1977-1985
(Millions)

Period	I	II	III	IV	Total	Percent Change
1977	$293.0	$307.0	$326.7	$326.7	$1,253.4	14.5
1978	322.9	347.4	365.6	365.6	1,401.5	11.8
1979	362.3	375.5	391.2	389.0	1,518.0	8.3
1980	384.8	368.5	366.6	383.7	1,503.6	- 0.9
1981	392.2	398.0	407.7	396.4	1,594.3	6.0
1982	389.4	389.3	398.5	393.9	1,571.1	- 1.5
1983	415.6	416.5	450.5	447.6	1,730.2	10.1
1984	477.1	486.8	502.3	497.5	1,963.7	13.5
1985[1]	515.6	543.2	542.5	537.3	2,138.6	8.9

[1] Estimate.

Source: Monthly Research and Statistical Bulletin, selected issues, Michigan Department of Treasury and 1985 estimate from the Department of Management and Budget.

the impact of steep back-to-back recessions in which Michigan real personal income dropped by 9.4 percent. Since 1982, economic recovery has generated real growth in retail sales of 6.1 percent in both 1983 and 1984. Michigan retail sales in constant dollars in 1984 remain 13 percent below the 1977 level of $17.6 billion. Detroit area retail sales grew 7.7 percent in 1983 and 5.4 percent in 1984, when measured in constant dollars.

Consumer spending in 1984, as measured by Michigan sales tax collections, increased 13.5 percent over the previous year. This represents the second consecutive year of substantial growth in consumer spending with 1984 experiencing the largest annual increase in consumer spending since 1977 (see Table 20). Adjusted for inflation, consumer spending in Michigan rose 9.6 percent in 1984. Michigan sales tax collections equal 4 percent of taxable retail sales. In 1984, Michigan ranked 24th in the U.S. in sales tax collections per capita.

Strong Auto-Related Sales Pace Sales Tax Collections

Sales tax collections increased in each component category in 1984. In addition, the percent change in 1984 exceeded the percent change recorded in 1983 in almost all categories (see Table 21) as the Michigan economy recovered from the recession. Strong growth continued in building material sales tax collections (up 16.9 percent), reflecting continued growth in Michigan's housing industry despite a sharp rise in mortgage interest rates (an increase of almost one full percentage point from an annual average of 13.6 percent in 1983 to 14.5 percent in 1984). Growth in the related category of furniture sales tax collections also continued in 1984 at 12.7 percent, equal to the increase recorded in 1983. The growth in furniture sales was maintained despite a diminished rate of growth in Michigan residential construction in 1984 (as measured by building permits issued) and a change in the mix of single-family and multi-family building permits issued last year. New private multi-family units comprised 30.4 percent of all new building permits issued in 1983, and they are estimated to be 37.5 percent of all new permits issued in 1984.

New and used vehicle sales tax collections was one of the fastest growing components in 1984 with growth of 23.0 percent to $330.7 million. Collections in 1984 exceeded the $320 million level reached in 1979 for the first time, but the 1984 growth rate was substantially smaller than the increase of 31.6 percent in new and used auto sales tax collections recorded in 1983.

Collections for service stations and other automotive products grew by 25.4 percent in 1984. This was the largest gain in any component category in 1984, and it represents a dramatic turnaround from 1983 when sales tax collections for service stations and other auto products fell by 0.2 percent.

Table 21

Michigan Sales Tax Collections by Component, 1983 and 1984[1]
(Millions)

Component	1983	Percent Change	1984	Percent Change
Building Materials	$ 93.4	13.3	$ 109.2	16.9
General Merchandise	162.2	5.7	178.3	9.9
Food	275.6	5.4	295.7	7.3
Automotive	440.9	17.0	546.4	23.9
New & Used Vehicles	268.9	31.6	330.7	23.0
Service Stations, Other	172.0	- 0.2	215.7	25.4
Apparel	76.0	8.4	84.0	10.5
Furniture	71.8	12.7	80.9	12.7
Miscellaneous Retail	171.0	9.8	190.7	11.5
Nonretail	436.9	7.2	471.5	7.9
Gas & Electricity	169.0	1.4	195.0	15.4
Other	267.9	11.2	276.5	3.3
Total	$1,727.8	10.0	$1,956.7	13.2

[1] Includes license fees and some penalties and interest.

Source: Monthly Research and Statistical Bulletin, Michigan Department of Treasury, selected issues, 1983 and 1984.

Nonretail sales tax collections, the second largest sales tax component, rose by 7.9 percent in 1984. Revenue from gas and electric sales surged by 15.4 percent to $195.0 million in 1984. Contributing to this rise were increases in the consumption of natural gas and electricity of 7 percent and 6.2 percent, respectively, and a 3.8 percent increase in energy prices as measured by the Detroit CPI.

The growth in retail sales and consumer spending in 1984 was accompanied by exceptionally high consumer confidence and a growing willingness among consumers to commit themselves to higher levels of debt burden than in 1983. The University of Michigan's Index of Consumer Sentiment peaked at 99.5 in the first quarter of 1984. This was the highest quarterly level recorded since the late 1960s. The index dropped to 95 during the fourth quarter of 1984, but the average level of confidence recorded over the entire year was also at a higher level than any yearly average since the late 1960s.

Improvements in the economy contributed substantially to the growth in retail sales and consumer spending in Michigan during 1984. Inflation rose by a modest 3.5 percent in 1984, and personal income grew by 9.8 percent, thus resulting in a substantial increase in real purchasing power. These improvements, along with record high levels of consumer confidence, were accompanied by greater consumer commitment to long-term financial obligations. Consumer debt as a percent of personal income grew during each quarter in 1984 (see Table 22). This trend was particularly significant during the last half of 1984 when consumer debt obligations, as a percent of personal income, reached levels last seen in 1980.

Table 22

U.S. Consumer Installment Credit, 1979-1984
(Millions)

Year	Outstanding Credit	Percent of Personal Income
1979	$ 312,024	15.99
1980	313,472	14.47
1981	335,691	13.82
1982	355,849	13.77
1983	396,082	14.43
1984 I	398,855[1]	13.65
II	417,772[1]	14.00
III	443,012[1]	14.54
IV	465,283[1]	15.01

[1] Quarterly average expressed at an annual rate.

Source: Federal Reserve Bulletin, Federal Reserve System, Board of Governors, selected issues, 1984 and 1985.

Strong Growth Continues in 1985

Substantial growth in Michigan consumer spending has continued into 1985. Preliminary estimates indicate that in the first half of 1985 Michigan personal income increased 7.6 percent, while real personal income increased 4.2 percent compared to the first six months of 1984. Those increases provide a strong base for continued growth in consumer outlays. Spending, especially auto purchases, has also been bolstered by lower interest rates in 1985. Preliminary figures indicate that consumer spending, as measured by Michigan sales tax collections, has increased approximately 10.5 percent through August 1985. By the end of 1985, Michigan sales tax collections will increase by 8.9 percent, down somewhat from the 13.5 percent increase recorded in 1984.

POPULATION

Population Growth Resumes in 1984

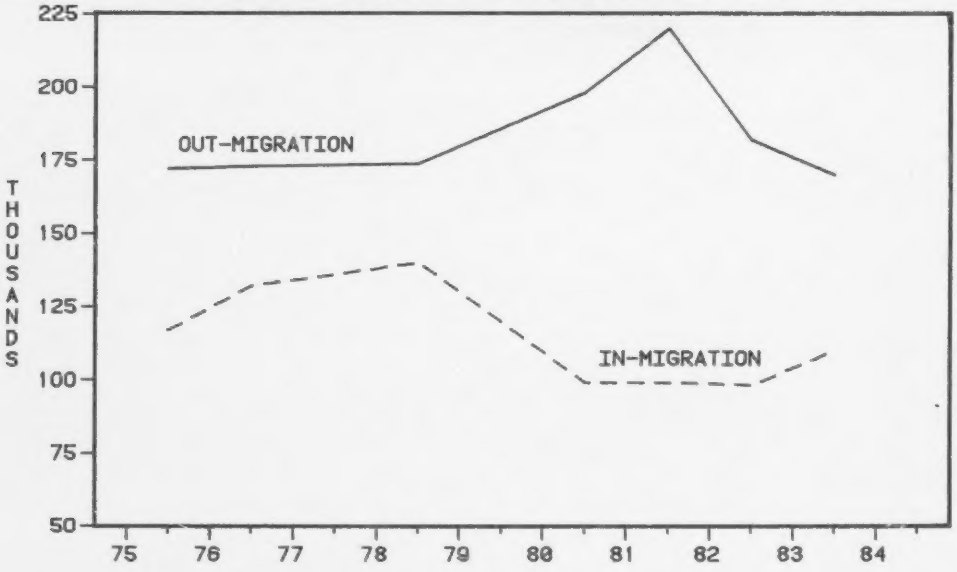
According to U.S. Census Bureau provisional population estimates, Michigan had a population of 9,075,000 as of July 1, 1984. This represents an increase of 25,000 people from the revised 1983 estimate of 9,050,000. The 1984 increase is the first increase since 1979, just prior to the beginning of the steep recession which Michigan began to recover from in 1983.

Reduction of Migration Losses

The revival in Michigan population growth is due to an increase in the number of people moving into Michigan, and a decrease in the number of people moving out of Michigan. As Chart 7 and Table 23 show, in-migration, as estimated from federal income tax return data, increased from 98,500 in 1983 to 110,800 in 1984. At the same time, out-migration decreased from

Chart 7

In-Migration and Out-Migration
of Federal Taxpayers in Michigan, 1975-1984



182,100 in 1983 to 170,800 in 1984, which is close to the level of out-migration during the mid-1970s. During the recession years of 1980-1982 an average of 200,000 people (as measured by federal tax return data) left Michigan for other states each year, with a peak out-migration of 220,500 people in 1982.

The reduction in out-migration began in 1983, when the number decreased to 182,100 from the record high in 1982. Despite the reduction in out-migration, net population loss through migration was 124,100 in 1983, according to the U.S. Census Bureau's estimates. Michigan's net loss in population through migration was reduced dramatically in 1984 to only 32,200 when in-migration from other states increased and out-migration from Michigan decreased further. Because there were 133,000 births and 76,000 deaths in 1984, the natural increase in population was more than the loss through migration; as a result, Michigan's population grew by 25,000 persons.

Migration between Michigan and Other States

The impact of economic conditions on the migration of Michigan's population is very significant. As Table 24 shows, during 1978 and 1979, when the economy in Michigan was expanding, the net loss of Michigan's population to other states averaged 33,000. There still were more people from the Northeastern and North Central neighboring states moving to Michigan than people from Michigan moving to these regions of the United States. The net loss from Michigan to the South and West has been part of a national population trend since the 1960s. Between 1980 and 1982, when Michigan's economy was in a severe recession, not only did the migration to the South and the West accelerate, but the previous net gain from the Northeast and North Central regions actually became a net loss. Michigan gained migrants from 17 states in 1978 and 1979. However, the net loss to each of these states after 1979 exceeded the earlier gains. For example, in 1978 and 1979 Michigan gained 3,100 people from Ohio, but in 1980 and 1981, the gain turned to a loss of more than 5,000 people. As a result, in 1981 and 1982 the net loss of Michigan's population amounted to more than 120,000.

As shown in Table 24, the major states of destination for Michigan's out-migrants in 1981-82 were Texas, Florida, California, Arizona, Colorado, Oklahoma, and Tennessee. The net loss of Michigan's population to these seven states accounted for 69 percent of the total loss of population for this period. If the net loss in 1979 is representative of the long-term

Table 23

Migration of Taxpayers and Their Families in Michigan, 1975-1984

	In-Migration		Out-Migration		Net Migration[1]	
Year	Number	% Change	Number	% Change	Number	% Change
1975-76	117,090	—	172,455	—	- 55,365	—
1976-77	132,317	13.0	173,049	0.3	- 40,732	- 26.4
1978-79	140,902	6.5	174,023	0.5	- 33,121	- 18.7
1980-81	99,845	- 29.1	198,945	14.3	- 99,100	199.2
1981-82	99,554	- 0.3	220,499	10.8	-120,945	22.0
1982-83	98,471	- 1.1	182,108	- 17.4	- 83,637	- 30.8
1983-84[2]	110,790	12.5	170,800	- 6.6	- 60,010	- 28.2

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[1] Net migration is the difference between in-migration and out-migration. It does not include net growth from births and deaths.

[2] Estimated.

Source: Internal Revenue Service, "Area Migration Flow Data," special release, various years.

Table 24

Migration of Michigan Population by Region of the U.S. and Selected States, 1978-1979 through 1982-1983

Regions and States	1978-79	1980-81	1981-82	1982-83
Total	- 33,122	- 99,100	-120,945	- 83,637
Regions				
Northeast	4,564	- 4,936	- 4,078	- 4,875
North Central	4,764	- 8,951	- 10,272	- 6,966
South	- 23,508	- 59,529	- 76,670	- 50,098
West	- 18,942	- 25,684	- 29,925	- 21,698
Selected States				
Arizona	- 5,352	- 5,733	- 6,734	- 4,595
California	- 6,967	- 9,706	- 11,030	- 9,254
Colorado	- 1,809	- 4,037	- 5,406	- 4,190
Florida	- 14,084	- 20,490	- 21,735	- 20,500
Georgia	- 1,132	- 3,050	- 2,684	- 2,451
Illinois	2,813	- 1,547	- 2,203	- 1,314
Indiana	419	- 984	- 1,836	- 1,557
Louisiana	- 675	- 1,728	- 2,262	- 1,106
North Carolina	- 582	- 1,704	- 2,224	- 2,333
Ohio	3,102	- 5,265	- 1,591	- 1,613
Oklahoma	- 396	- 2,050	- 4,402	- 1,823
Tennessee	347	- 3,308	- 3,232	- 2,833
Texas	- 4,831	- 17,005	- 30,598	- 10,069
Virginia	- 6	- 2,040	- 1,612	- 1,921

Source: U.S. Internal Revenue Service, "Area Migration Flow Data," special release, various years.

population trend, the increased amount of population loss in 1982 can be considered loss primarily due to the economic recession. This recession factor accounted for one-fifth of the loss to Arizona, one-third of the loss to California and Florida, more than one-half of the loss to Colorado, and more than 80 percent of the loss to Oklahoma, Tennessee and Texas.

The impact of the recession on migration in 1983 was reduced significantly. As Michigan's economy expanded in 1983, loss of migrants to other states slowed substantially. The exception was to the northeastern states where Michigan's out-migration remained as high as in 1982. The total state loss in 1983 was reduced from that in 1982 by 30.8 percent. The largest reductions in out-migration in 1983 occurred in those states which had the greatest gains during the recession. For example, Michigan's net loss to Texas increased from 4,800 in 1979 to 30,600 in 1982, but in 1983 the loss was reduced to 10,100--a 67 percent reduction in the loss between 1982 and 1983. In contrast, the net loss to Florida in 1982 was 21,700, but the 1983 loss was reduced by only 5.5 percent to 20,500.

The difference between the two extreme cases may reflect the age composition of those who migrated. According to the 1980 census, 63.4 percent of out-migration to other states was between the ages of 15 and 44 and 20 percent were age 45 and over. Those who migrated to Texas were composed of 69 percent age 15-44 and 12 percent age 45 and over. In contrast, among those who migrated to Florida, only 39.9 percent were age 15-44, and about one-half, or 49 percent, were age 45 and over. In other words, the states that received Michigan's middle age population and retirees during the recession tend to receive these migrants even after the recession. However, the loss of Michigan's population to the states that primarily received young age population during the recession tends to fluctuate over time, as economic conditions change. A striking example of this situation is the migration flow between Texas and Michigan.

The dramatic decline in population loss during the economic recovery is consistent with Michigan's experience during the early 1960s and the mid-1970s. During the 1974-75 recession, Michigan experienced a net out-migration of more than 60,000, but the net out-migration dropped to 18,000 in the first year of the recovery. The same pattern occurred in the late 1950s through the early 1960s. In 1962, a prolonged recession caused net out-migration of more than 80,000. A year later when the economy began to recover the loss turned to a gain of 15,400. Thus, the current sharp reduction in out-migration repeats the pattern established over the past three decades.

Turnaround in County Population Growth

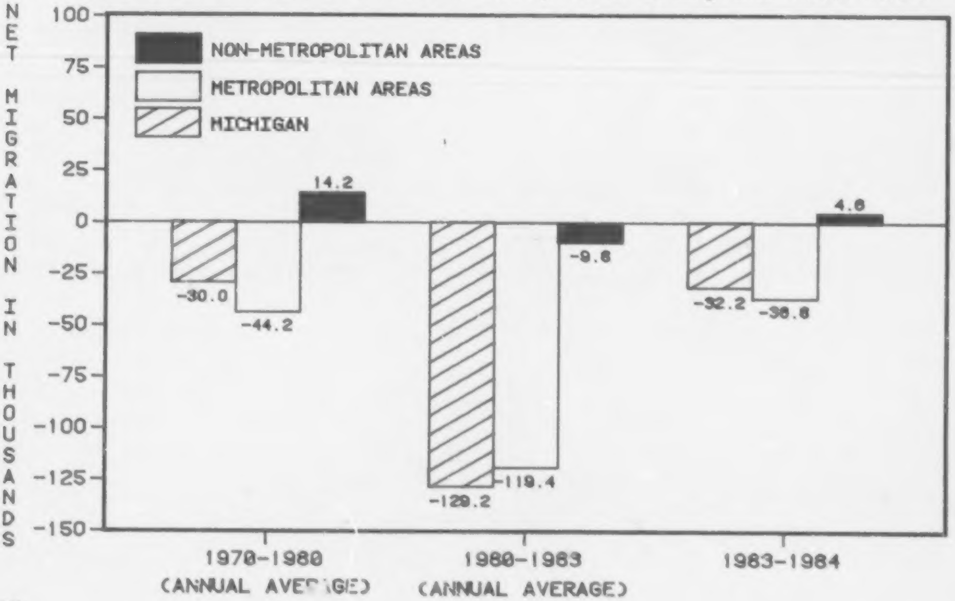
The renewal of population growth in 1984 was even more dramatic in many Michigan counties. Thirty-five counties which experienced population loss between 1980 and 1983 gained population in 1984. Other counties experienced either a substantial reduction of population loss or greater gains in 1984, compared to the 1980 to 1983 period. Only six counties turned from a gain in 1980-83 to a loss in 1984.

The turnaround was concentrated in metropolitan areas. Other than Jackson County, every metropolitan county experienced either a reversal from population decline or a drastically reduced population loss. Ingham, Muskegon, Washtenaw, Macomb, and Oakland experienced the most significant population gains, while Genesee, Saginaw, and Wayne experienced a sharp reduction in population loss. Strong population growth in Kent, Kalamazoo, and Ottawa Counties continued at a higher rate in 1984 than in the earlier period.

In 1984, every nonmetropolitan county in the southern lower peninsula either recovered from population loss between 1980 and 1983 or experienced greater growth. Counties in the northern lower peninsula and the Upper Peninsula, with few exceptions, also experienced population gain (see appendix table C-35).

Chart 8

Net Migration of the Population in Metropolitan and Nonmetropolitan Areas in 1970-1980, 1980-1983, and 1983-1984



A striking contrast in population change and net migration between the period of recession (1980-83) and recovery (1984) is clear in Table 25. Between 1980 and 1983, the northern lower peninsula experienced little growth; all other areas, metropolitan and nonmetropolitan, experienced population loss and out-migration. All areas, except central metropolitan areas, had population growth in 1984. Nonmetropolitan areas, in particular, began to gain population through migration.

However, the gain through migration in nonmetropolitan areas in 1984 was not as significant as it was during the 1970s when there was more than a 14,200 net in-migration every year (see Chart 8). The reduction in population loss in metropolitan areas was even more profound. Net out-migration from metropolitan areas averaged 119,400 in 1980-83 but dropped to 36,900 in 1983-84, a level which is even lower then the loss the metropolitan areas as a whole experienced in the 1970s (44,200 every year).

Population Growth Continues

Michigan's population growth in 1984 indicates a return of population trends to the patterns observed in the 1970s. The population loss in 1980-83 was an interruption of the general trend due to the severe recession. As a result of continued real economic growth in 1985 and 1986, a further reduction in population loss through out-migration is expected in 1985 and 1986. For 1985, net out-migration from Michigan is expected to fall to 15,400, the level experienced in 1976 and 1977. In terms of county population changes the 1984 patterns should continue in 1985 with Michigan's metropolitan areas experiencing moderate growth and nonmetropolitan areas continuing to grow slowly.

MICHIGAN
SECTOR ANALYSIS

- Motor Vehicle Industry
- Tourism
- Michigan Agriculture
- Energy and Mineral Industries
- Transportation
- Housing and Construction

MOTOR VEHICLE INDUSTRY

Motor Vehicle Sales Reach Five-Year High

In 1984, the United States' automotive industry continued to benefit from improved market conditions and from the effects of the massive cost-cutting drive undertaken during the recession. Also, for the second year in a row, the voluntary import restraints restricting Japanese imports were effective in reducing the sales of these automobiles.

As a result of the above factors, sales of domestic motor vehicles rose in 1984 to 11.5 million units, an increase of two million units or 21 percent above calendar year 1983, while the import share declined from 23.6 to 20.7 percent of total sales in 1984. While these strong sales figures did not set a record, profits of the Big Three manufacturers did set a record totaling $9.8 billion, up 56 percent from the strong 1983 performance. This represented a significant turnaround from 1980 when all three firms suffered losses and, as late as 1982, Big Three profits totaled $236 million. An additional factor contributing to increased profitability during the 1984 recovery was the shift by consumers from smaller vehicles to larger and more fully-equipped cars.

Automobile Sales

As shown in Table 26, U.S. automobile sales increased 1.2 million units to 10.4 million units in 1984, a 13 percent increase over 1983. This was almost the same increase in the number of units that occurred in 1983 over the extremely depressed level of 1982. Even after two consecutive years of strong growth, U.S. passenger car sales have still not recovered to the levels of the late 1970s. While the percentage growth in sales was lower in 1984, it applied to a considerably larger base containing more U.S. produced cars.

Factors contributing to this sales performance included a strong increase in real personal income of 7 percent in 1984 and a moderate increase of only 2.8 percent in new car prices. In addition, gasoline prices declined by 1.6 percent, the third year in a row of falling prices. Factors that may have slowed sales somewhat, particularly late in 1984, were a slowing in the growth of real income and some catch-up in the pent-up demand for new cars created during the recession.

Table 26

U.S. Motor Vehicle Sales, 1980-1985
(Millions of Units)

Vehicle	1980	1981	1982	1983	1984	1985[1]
Passenger Cars						
Total	9.0	8.5	8.0	9.2	10.4	10.7
Domestic	6.6	6.2	5.8	6.8	8.0	8.0
Imports	2.4	2.3	2.2	2.4	2.4	2.7
Trucks						
Total	2.5	2.3	2.6	3.1	4.1	4.1
Domestic	2.0	1.8	2.1	2.7	3.5	3.5
Imports	0.5	0.5	0.4	0.5	0.6	0.6

[1] Estimated by the Michigan Department of Management and Budget.

Source: Automotive News, Crain Automotive Group, Inc., selected issues.

The increase in automobile sales during 1984 occurred almost entirely in U.S. produced automobiles, as shown in Chart 9. Sales of U.S. produced cars totaled 8 million, 1.2 million above 1983. The sales of imported cars totaled 2.4 million, about the same number as in 1983. As a result, the import share of the automobile market fell to 23.1 percent, the lowest share since 1979 (see Chart 10).

There were a number of factors contributing to this decline in market share, but the most important was the voluntary vehicle restraints on automobile imports by the Japanese. In 1984, these restraints worked very effectively. Although vehicle restraints were increased slightly from 1.65 million to 1.85 million units, the timing of Japanese imports, plus strong U.S. demand, kept inventories of popular Japanese models extremely low. At the end of the 1984 model year, inventory of imported cars fell to a 23-day supply with Honda at two days and Toyota at seven days. A 60-day supply is considered to be normal for the industry. Foreign car inventories were rebuilt slowly during the balance of the year. This short-supply situation resulted in long waits and sharp increases in the prices of some Japanese models, discouraging sales and resulting in some buyers switching to U.S. produced automobiles.

Chart 9

U.S. Auto Sales, 1976-1984

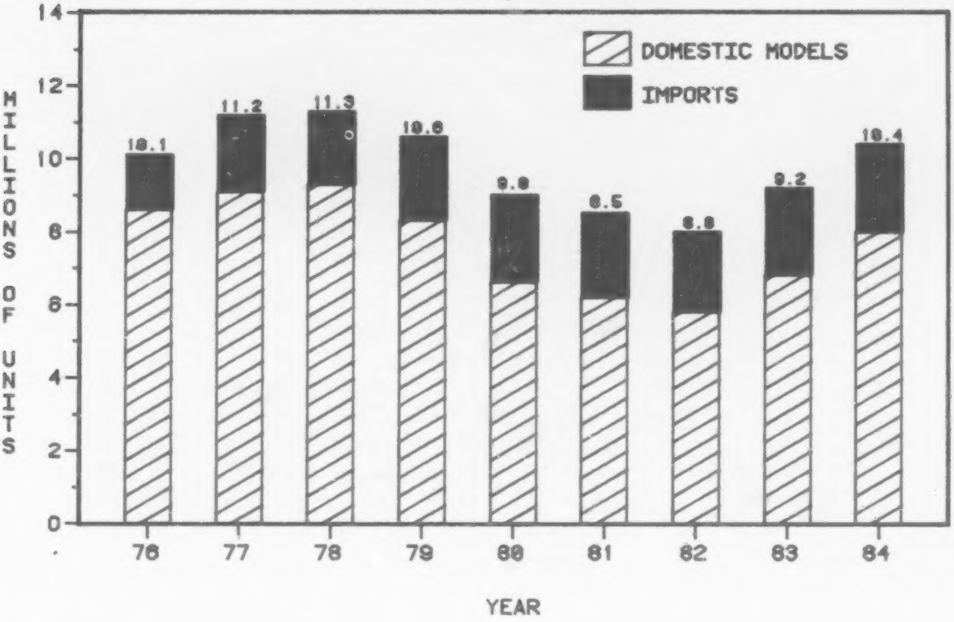
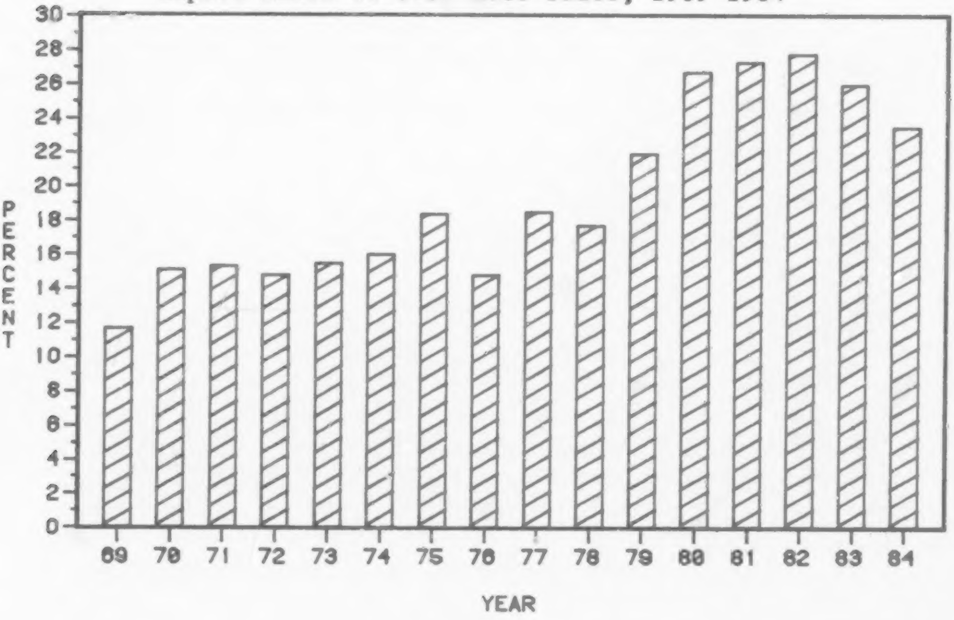


Chart 10

Import Share of U.S. Auto Sales, 1969-1984



Truck Sales

Truck sales totaled 4.1 million units in 1984, up 32.3 percent from the previous year and just under the record levels of 1978. Both domestic and imported truck sales increased with domestic sales rising by almost 30 percent to 3.5 million vehicles. This performance was aided by the strong consumer acceptance of domestically manufactured compact trucks which have been produced since 1982. There was some swing away from compact trucks to full-size light trucks by 1984, in part, because of lower fuel prices.

Also helping to increase truck sales in 1984 was the popularity of the new, smaller vans introduced by Chrysler and General Motors. The improving economy also resulted in stronger heavy and medium truck sales, which depend on the level of business investment. Imported truck sales increased 31 percent in 1984 over 1983 levels, maintaining their market share at 14.6 percent. This was accomplished in the face of a 25 percent tariff on imported trucks. With restrictions on car imports, Japanese truck makers pushed truck sales hard and accepted low profit margins. This made the light truck market very competitive, especially for the compact trucks; as a result, a basic compact pickup truck was the least expensive new vehicle available. The year closed with both Japanese and European importers introducing new and improved trucks in the light and medium weight classes.

Production Approaches Eleven Million Units

U.S. Motor Vehicle Production

As a result of the increase in motor vehicle sales during 1984, U.S. motor vehicle production increased by 17.5 percent to 10.9 million cars and trucks. Truck production showed the strongest increase rising 30.2 percent to 3.15 million units (see Table 27).

Automobile production increased by 13.1 percent to 7.78 million cars, a good year but still below the levels of the late 1970s. The selling pace was slightly faster than the rate of production, drawing down inventories slightly during the year. Automobile production was also somewhat constrained by the loss of plant capacity during the recession years and the need to modernize both plants and product. This has resulted in a steady redesign of automobiles and lengthy plant modernizations, as opposed to traditional model changeovers.

Table 27

U.S. and Michigan Motor Vehicle Production, 1980-1985
(Millions of Units)

Vehicle	1980	1981	1982	1983	1984	1985[1]
Passenger Cars						
U.S.	6.38	6.27	5.11	6.88	7.78	7.60
Michigan	1.73	2.05	1.78	2.16	2.16	2.18
Percent of U.S.	27.1	32.7	34.8	31.4	27.8	28.7
Trucks						
U.S.	1.63	1.64	1.90	2.42	3.15	3.20
Michigan	0.43	0.46	0.58	0.68	0.87	0.84
Percent of U.S.	26.4	28.0	30.5	28.1	27.6	26.3
Total Motor Vehicles						
U.S.	8.01	7.91	7.01	9.30	10.93	10.80
Michigan	2.16	2.51	2.36	2.84	3.03	3.01
Percent of U.S.	27.0	31.6	33.7	31.1	27.7	27.9

[1] Estimated by the Michigan Department of Management and Budget.

Source: Automotive News, Crain Automotive Group, Inc., selected issues.

The rise in truck production of 730,000 reflected the recovery of the truck market from a deep recession in the early 1980s. It also reflects the continued trend of substituting light trucks, such as compact pickup trucks and vans, for automobiles in personal transportation and light hauling. Improved business conditions also helped increase demand for all sizes of working trucks, as many firms had delayed these purchases during the recession.

Michigan Motor Vehicle Production

During 1984, motor vehicle production in Michigan increased 6.7 percent to 3.03 million vehicles (see Table 27 above). Because the national increase exceeded the Michigan growth rate, Michigan's share of production dropped to 27.7 percent in 1984. This reduction arose, in part, from the cyclical pattern in

Table 25

Population Change and Net Migration in Michigan Areas, 1980-1983 Annual Average and 1983-1984

	1980-83 Annual Average				1983-84			
	Change		Net Migration		Change		Net Migration	
Area	Number	Rate[1]	Number	Rate[1]	Number	Rate[2]	Number	Rate[2]
Michigan	- 65,462	- 0.71	-129,234	- 1.33	24,340	0.27	- 32,226	- 0.36
Metropolitan[3]	- 65,313	- 0.85	-119,402	- 1.56	10,930	0.15	- 36,874	- 0.49
Central[4]	- 55,488	- 1.12	- 89,864	- 1.18	- 6,734	- 0.14	- 36,707	- 0.77
Fringe[5]	- 9,825	- 0.36	- 29,538	- 1.09	17,664	0.66	- 167	- 0.00
Nonmetropolitan	- 149	- 0.00	- 9,832	- 0.62	13,410	0.84	4,648	0.29
Southern Lower[6]	- 1,727	- 0.22	- 7,352	- 0.94	7,336	0.95	2,058	0.27
Northern Lower[6]	3,031	0.61	159	0.03	4,511	0.89	2,182	4.31
Upper Peninsula	- 1,155	- 0.36	- 2,639	- 0.83	1,563	0.50	408	0.13

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[1] The 1980-83 annual average rates are expressed as a percent of 1980 population.

[2] The 1983-84 rates are the percentage changes from 1983 population.

[3] Metropolitan areas are the counties in Standard Metropolitan Statistical Areas as of 1981.

[4] Central metropolitan counties are the counties which contain a central city (or cities) of Standard Metropolitan Statistical Areas.

[5] Fringe counties are the metropolitan counties which do not contain central metropolitan cities as defined in 1981.

[6] The northern lower peninsula area includes the following counties: Arenac, Clare, Gladwin, Lake, Mason, Osceola and the area north of these counties in the lower peninsula. The southern lower peninsula area includes nonmetropolitan counties located south of these counties.

Source: U.S. Bureau of the Census and Michigan Department of Management and Budget.

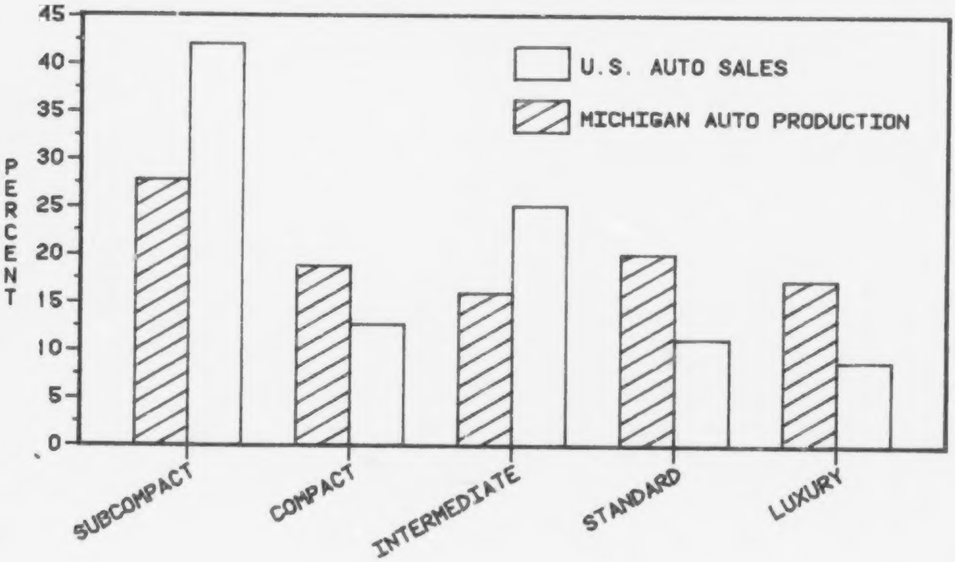
production which results in a greater falloff in production in other states during a recession. Frequently production is kept going at the Michigan headquarters plant while satellite plants, often in other states, cease production. As a result, the rebound is often stronger outside of Michigan. Another factor reducing Michigan's share of production was large scale modernization in some of its automotive plants. For example, the major manufacturing facilities at Lansing were closed or had reduced production from April to September.

Michigan truck production increased by approximately 190,000 units to 870,000, an increase of 27.9 percent. Michigan produced a variety of compact, light, medium and heavy trucks with production concentrated in traditional light trucks.

The mix of automobiles manufactured in Michigan continues to be somewhat weighted toward large and luxury automobiles (see Chart 11). These classes represent 37.4 percent of Michigan production and only 21.6 percent of national production. However, recently completed and planned retooling should provide a strong boost to Michigan production in the compact and intermediate classes. Michigan already had a higher percentage of compact car production in 1984 than the rest of the nation.

Chart 11

Automobile Product Mix--1984 Michigan Production and U.S. Sales



Japanese Automobile Imports Increase in 1985

To avoid more stringent restrictions, Japanese automobile companies have been voluntarily limiting the number of cars imported for sale into the U.S. since April 1, 1981. Through March 31, 1984, the number of vehicles imported was limited to 1.65 million units per year. During the year ending March 31, 1985, the number of vehicles imported was increased to 1.85 million units. When the voluntary restraints expired at the end of March 1985, the Japanese Ministry of International Trade and Industry announced that a new limit of 2.3 million vehicles would be exported to the U.S. over the next 12 months.

The additional 450,000 units, an increase of 24 percent, will not occur immediately. Because of time lags in production and distribution, and changes in distribution of the quota among manufacturers, it will take some time for Japanese manufactured vehicles to reach the new level of 2.3 million units. Additional Japanese units sold in the U.S. are projected to build gradually to a level of 150,000 units by the first quarter of 1986. Total U.S. auto sales should be somewhat higher as a result of increased Japanese imports, due to increased price competition and a wider selection of imported vehicles. This will result in less than a one-for-one substitution of Japanese for American produced cars. It is estimated that United States domestic car sales will decline 25,000 less per quarter than Japanese unit sales will increase. Thus, over the 12 months beginning April 1, 1985, total sales could increase by 100,000 units as domestic sales fall 350,000 units and imports increase 450,000 units. In Michigan, increased imports could displace up to 8,000 motor vehicle jobs (annual rate) by the first quarter of 1986.

Automotive Industry Faces New Uncertainties

Automotive sales are being affected by a number of significant factors in 1985. Consumer optimism is at high levels, as measured by most indicators. The significant decline in interest rates so far this year is also encouraging automobile sales. However, the growth rate of U.S. personal income and real disposable personal income has slowed in 1985. Real disposable personal income is growing at a rate over 2 percentage points slower in 1985 compared to 1984. In addition, consumer debt is beginning to rise rapidly, which could bring about a sharp drop in sales if consumers feel that the debt is becoming too burdensome. An additional variable adding uncertainty is the potential impact on total sales of the increased imports of Japanese automobiles discussed above.

Automobile sales in 1985 are projected to increase to 10.7 million units of which 7.97 million are expected to be domestic automobiles. This is an increase of just over 18,000 units from 1984, essentially stable despite slightly stronger sales overall. The imports are expected to have stronger sales in the second half of the year as inventories of the popular Japanese models continue to build. This should result in a situation of declining domestic sales in a stable market as the year ends.

Foreign automobile sales are estimated at approximately 2.7 million, an increase exceeding 400,000 units over the 1984 calendar year level. This will result in an import share of 25.5 percent of the market.

Automobile sales will continue to be affected by the increasing variety of truck vehicles that compete with the automobile in providing personal transportation. A few years ago the small pickup truck was introduced. Later, downsized vans with reasonably good fuel efficiency were introduced. By the end of 1985 all of the Big Three manufacturers will have introduced such vehicles. In part for this reason, truck sales are expected to remain at last year's level. There is some slowing toward year end with reduced investment in large trucks because of completed catch-up demand and some slowing of small pickup sales as the small automobile market becomes more competitive.

Truck sales are expected to total 4.1 million units of which 3.5 million will be domestic trucks. Despite a 25 percent tariff, imported trucks are estimated to sell 600,000 units, thus maintaining their share of the American truck market.

In 1986 and 1987, the automobile market will see increased pressure from the imports of Asian nations other than Japan, including Korea. Latin America, especially Mexico and Brazil, will become more important as suppliers of automobiles and trucks to the U.S. market. This will partly be offset with increased domestic manufacturing by all major Japanese automobile makers. Domestic automobile manufacturers should also benefit from a somewhat weaker dollar during 1986.

In 1985, U.S. motor vehicle production is estimated at 10.8 million units, of which 7.6 million are expected to be automobiles and 3.2 million trucks. Except for trucks, these numbers represent slight declines from last year. With slightly lower fuel prices the production mix will shift moderately toward larger automobiles, including performance automobiles, and away from the most fuel efficient compact and subcompact models. Major American and Japanese firms seem well equipped to meet this shift. General Motors and Ford face a problem with the Corporate Average Fuel Economy requirement of 27.5 miles per gallon because the available credits carried forward from previous years will be depleted in 1985. These firms are already seeking a lower requirement of 26 miles per gallon for 1986 and the National Highway Transportation Safety Administration has approved such a proposal for the 1986 model year, although no ruling has been made on the 1987 request.

Despite the shifting demands for cars and trucks, Michigan is estimated to increase its share of motor vehicle production to 27.9 percent in 1985 from 27.7 last year. This is encouraging because two major General Motors facilities are undergoing conversion and modernization and only resumed production in the fall. Last year's production was also depressed by a modernization at the Lansing Oldsmobile Division. In 1985, Michigan motor vehicle production is estimated to be 3,013,000 units. The modernizations also help assure continued leadership in motor vehicle production for Michigan.

Automobile production in Michigan for 1985 is now estimated to be 2.18 million units, 28.7 percent of total U.S. production. Truck production is estimated at 841,000. The current mix of Michigan motor vehicle models is generally favorable with good strength in compact and large car manufacturing and increasing strength in the intermediate models. The next few years will probably see the most intense competition in the subcompact area as several newly industrialized countries enter this market segment.

TOURISM

Significant Growth in 1984

Michigan's tourist industry experienced another year of expansion in 1984, as the economy continued to improve in Michigan and the surrounding Great Lakes states. It is estimated that tourists spent $6.4 billion in Michigan in 1984, an increase of 8.5 percent over the $5.9 billion spent in 1983. When adjusted for inflation, estimated tourist expenditures rose 5 percent in 1984. This spending helped to support 148,000 direct jobs in tourist-related businesses in Michigan in 1984, as well as 115,000 additional jobs in other sectors of the economy which provide products and services to tourist-related businesses. Overall, tourist-related employment increased 3.6 percent in 1984.

Michigan offers tourists a wide spectrum of attractions--including lakes, beaches, forests, and other natural resources, as well as many museums, historical sites, and cultural events that are located in the state's cities and towns. Many of these attractions are enjoyed by tourists who visit one of the 81 state parks maintained throughout Michigan. In 1984, 5.2 million visitors stayed overnight in Michigan's state parks. This was a slight decline of 1.3 percent from the 5.3 million overnight campers in 1983 (see Table 28). Ludington State Park led all parks with 271,016 camper days in fiscal 1984. There was also a decline among day visitors from 17.5 million in 1983 to 16.8 million in 1984, a drop of 4.5 percent. Both of these declines were in part attributable to less favorable weather conditions during the 1984 summer season and to the Fourth of July holiday falling in midweek in 1984. Despite these declines, however, 16.8 million day visits to Michigan state parks in 1984 were still substantially ahead of the 14.9 million visits recorded in 1982. Two state parks, Holland and Warren Dunes, had day-use attendance figures of over one million people in 1984. Holland was the most popular park for day-use attendance with over 1,447,000 visitors.

Other indicators of the level of tourism activity in Michigan include such diverse measures as traffic on major tourist routes, vehicle crossings of the Mackinac Bridge, visitor counts at Michigan Travel Information Centers, and reports on the collection of hotel and motel sales and room use taxes. Traffic-based indicators reflect the state-wide growth in tourism in 1984. Highway traffic counts were up by approximately 3.8 percent on major tourism routes, and traffic across the Mackinac Bridge was up by 3.2 percent. A total of 2.5 million vehicles crossed the "Big Mac" in 1984; this was the second largest traffic volume recorded since the bridge opened in 1957. The greatest traffic volume was in 1978 when 2,539,620 vehicles crossed the bridge. High traffic volume in 1984 was encouraged by favorable gas prices, as the average price of $1.407 per gallon for full-service unleaded gasoline in 1984 was virtually unchanged from the average price in 1983. The number of visits to Michigan's Travel Information Centers dropped by 2.6 percent in 1984. This decline, however, reflects changes in the method of counting visitors as well as facility closures for repair and maintenance.

Revenues from hotel and motel sales taxes and room use taxes increased a strong 8 percent in 1984, reflecting greater spending by tourists as well as increased business-related travel. Hotel and motel sales tax collections totaled $10.2

Table 28

Michigan Tourist Indicators, 1983 and 1984
(Thousands)

Indicator	1983	1984	Percent Change
State Parks			
Overnight Camping	5,292.9	5,224.6	-1.3
Day Visits	17,533.5	16,752.5	-4.5
Total	22,826.4	21,977.1	-3.7
Mackinac Bridge Crossings	2,426.8	2,503.6	3.2
Travel Information Center Visits	2,026.3	1,973.3	-2.6
Hotel and Motel Taxes			
Sales Tax	$ 9,333.5	$10,234.1	9.7
Room Use Tax	11,710.3	12,487.2	6.6
Total	$21,043.8	$22,721.3	8.0

Source: Michigan Department of Commerce, Travel Bureau.

million in 1984, an increase of 9.7 percent over the previous year; room use taxes reached $12.5 million, an increase of 6.6 percent over the 1983 level.

Winter Activities Grow in Popularity

A small but fast-growing segment of Michigan's tourism industry is focused on winter recreational activities. During the 1984-1985 winter season (November 27, 1984 through March 11, 1985), the increasing popularity of downhill skiing, cross-country skiing, snowmobiling, ice fishing, and winter camping contributed to growth in almost all winter tourism indicators. Winter visitors to state parks were up substantially for both overnight and day visits. Overnight camping increased by 9.2 percent during the 1984-85 season, and day visits grew by 8.9 percent. Winter highway traffic counts increased 6.4 percent, and Mackinac Bridge crossings--both total vehicle crossings and vacation-related crossings--were higher in 1984-85 than in 1983-84. Among the traffic-related measures, only stops at Travel Information Centers declined. Visitors to ten operating information centers numbered 180,510 during the 1984-85 winter season, down almost 7,000 or 3.7 percent from the prior year.

Downhill skiing operators in Michigan experienced a strong season in 1984-85 despite fewer operating days than in the previous year. Twenty-eight Michigan downhill skiing resorts reported 2,410 days of operation in 1984-85, a decline of 6.2 percent from the 2,569 days of operation reported in 1983-84. The number of lift tickets sold, however, exceeded 1.6 million during the 1984-85 winter season, an increase of 8.6 percent. More significantly, the average number of lift tickets sold per operating day jumped from 583 in 1983-84 to 675 in 1984-85, a 15.6 percent increase.

Michigan Tourism in 1985

Tourist activity in 1985 is continuing to grow, but at a slower rate of growth than was experienced during 1984. The continuing strength of the dollar has discouraged tourist visits from Canada, while simultaneously making vacations outside of the United States an attractive alternative for some Michigan residents. Nonetheless, winter tourism activity, as noted above, sent Michigan off to a strong start early in 1985. The 1985 summer tourist season has also been moderately strong.

Tourism

Continuing improvements in the economic climate in Michigan and surrounding states have contributed to the growth in both business travel and tourism in Michigan in 1985. The continued strong growth in employment and real disposable income in Michigan and surrounding states will result in boosting the total volume of tourist activity in Michigan this year by 2 to 3 percent. Adjusted for inflation, tourist expenditures for lodging, meals, entertainment, gasoline, and souvenirs will grow 3 to 5 percent by the end of 1985.

MICHIGAN AGRICULTURE

The Challenge Facing Agriculture

Agriculture in the United States faced serious problems in 1984. Because agricultural markets are frequently national and often worldwide, Michigan's farmers were confronted with many of the same problems. In the 1970s agriculture was encouraged to expand to meet heavy export demand for agricultural products. At the same time, the sharp increase in general price levels resulted in rapid increases in farmland prices. Land prices increased at rates exceeding increases in the rate of return from agricultural production in the 1970s, making the period of time needed to pay back land purchases much longer. Rising farmland values also provided the collateral needed to finance increased borrowing for farm expansion and new equipment purchases. In contrast, in the 1980s, the agricultural exports of the United States faced increased competition from expanded production in other countries. Simultaneously, the U.S. dollar began to strengthen, lessening the competitiveness of farm exports by increasing their prices to other countries. Several countries, particularly those of the European Common Market, increased their subsidization of agricultural exports. Also, domestic grain and meat consumption declined in the early 1980s because of the recession and recovered less than normally because of shifting tastes which further reduced demand.

In the early 1980s the overall inflation rate began to decline, reducing the demand for farmland and the rate of increase in farmland prices. Also, prices received by farmers nationally began to decline in 1981, largely because of the conditions cited earlier. Except for a brief upward movement caused by the "Payment-in-Kind" (PIK) program, prices have declined steadily to near the level in 1979. At the same time, prices paid by farmers have risen steadily although at a decreasing rate. As a result, the ratio of prices received to prices paid fell from 107 in 1979 to 82 by December 1984, indicating a severe profit squeeze on agriculture nationally. This profit squeeze coincided with declining farmland values in many areas. While declining land values may help new farmers starting out, they pose serious problems for current farmers who are faced with heavy debt and declining collateral. The overall situation leaves many farmers with both declining income to service debt and declining collateral to back up the debt. This increases the lending risk to banks and has contributed to a post-depression high number of bank failures in 1984.

Agriculture

Farmland prices declined in the Chicago Federal Reserve District, which contains the lower peninsula of Michigan and much of the best land in the northern corn belt, to their lowest levels since 1978. This has wiped out approximately one third of the equity of farmers in the district. While average farm equity remains substantial, there is a wide variation in debt ratios with approximately 20 percent of district farmers having debts in excess of 40 percent of assets. It is at debt levels above this point that refinancing or insolvency problems are more likely to develop during times of low farm income.

The Michigan Situation

Michigan farmers have not been isolated from the national and international developments, although their problems and opportunities are somewhat different and more diverse, as is Michigan agriculture itself. Michigan farmers have felt the decline in farm prices and income that occurred during the early 1980s. Farm proprietors' net income has declined since 1981 to $256 million in 1984, just over one half its 1981 level. A Michigan Department of Agriculture survey indicates that 25 percent of farmers have debt/asset ratios in excess of 40 percent, indicating possible current or future financing problems. Adding to the seriousness of the situation is an indication that farm financial problems are more seriously affecting younger operators with middle-sized farms. Much of this problem stems from the relatively recent purchase of higher-priced land in the 1970s.

Some indicators were less negative for Michigan farmers than for the nation as a whole. Net farm income remained positive for almost all types of farming although at levels low enough to significantly depress average returns to farm proprietors. Michigan farmland values have declined by approximately 15 percent from their 1981 peak compared to over 30 percent in Illinois and Iowa. This smaller decline in farmland values indicates less of a loss in net worth for farm operations in Michigan. An additional positive factor was the fact that the 1984 Michigan wheat crop set a per-acre production record in an environment of moderately strong prices.

Table 29 illustrates the diversity of Michigan agriculture by showing the national ranking of Michigan production of several of the more important commodities in Michigan agriculture. The table also illustrates the geographic concentration of the commercial production of many fruits and vegetables.

Table 29

Ranking for Michigan Agricultural Commodities, 1984

Commodity	National Rank	% of U.S. Production
Tart cherries	1	77.5
Cucumbers for pickles	1	17.9
All dry beans	1	20.1
Asparagus	2	22.6
Prunes & plums	2	24.5
Apples	3	9.4
Carrots	3	8.6
Sweet cherries	3	18.2
Tomatoes, processing	3	2.3
Grapes	5	1.0
Sugar beets	5	9.5
Milk	6	4.0
Alfalfa hay	7	5.1
Corn for grain	8	2.9
Hogs & pigs	11	2.4
Soybeans	15	1.7

Source: Michigan Crop Reporting Service.

The value of total agricultural marketing in Michigan declined by 7.4 percent to $2.79 billion in 1984. As shown in Table 30, most of this decline occurred in the category for crops which fell by 12.7 percent. The value of livestock production fell by a very small amount. Declining farm prices were an important factor in the lower value of farm marketing.

Farm prices paid Michigan farmers weakened in 1984 after reaching a post-recession peak in January 1984. By late 1984 they had returned to the levels of the spring of 1983 as the "PIK" program effects faded rather quickly. As Table 31 shows, the price of all crops declined from the beginning of the year. The bulk of these declines occurred after midyear and affected fall crops. Prices for livestock were more stable with only eggs showing a steep decline.

Table 30

Michigan Cash Receipts from Farm Marketing, 1983 and 1984
(Millions)

	Livestock and Products		Crops		Total	
Period	1983	1984[1]	1983	1984[1]	1983	1984[1]
Jan.	$ 105.4	$ 109.7	$ 137.7	$ 120.3	$ 243.1	$ 230.0
Feb.	96.6	100.5	104.3	104.3	200.8	204.8
March	107.3	109.2	115.4	111.6	222.7	220.8
April	106.3	105.4	92.7	74.3	199.0	179.6
May	105.4	99.6	83.4	73.8	188.8	173.4
June	103.1	100.4	86.8	88.4	189.9	188.8
July	102.9	101.9	174.5	161.0	277.4	262.9
August	104.7	103.9	148.6	118.7	253.3	222.6
Sept.	99.3	96.3	157.5	120.7	256.8	217.0
Oct.	105.5	104.5	189.9	165.6	295.5	270.1
Nov.	101.3	102.1	296.2	262.5	397.4	364.6
Dec.	105.3	100.4	171.5	159.0	276.8	259.4
Total	$1,243.0	$1,233.8	$1,758.5	$1,560.1	$3,001.5	$2,793.9

[1] Preliminary.

Source: U.S. Department of Agriculture.

Corn, the most important field crop in Michigan, suffered some damage from summer drought with yields per acre 8.7 percent below 1983 levels. However, total yield was up 33 percent because of expanded acreage after the end of the "PIK" program. Prices fell 19.7 percent, in part because the United States crop surged 83 percent over 1983 in the face of adequate supplies of feed grains worldwide.

Dry conditions in summer also held down Michigan soybean production. However, while Michigan production fell 5 percent in 1984, prices weakened as U.S. production rose 14 percent. Dry bean production also suffered damage from the dry summer as well as a wet spring, resulting in a crop of 4.2 million hundredweight, 8 percent below the previous year. Dry bean prices declined relatively little over the year.

Michigan winter wheat production set a record of 45.6 million bushels, 27 percent above a year ago. Favorable growing conditions resulted in a record yield of 57 bushels per acre. Production of winter wheat also increased nationally. Potato production rose sharply to 12.5 million hundredweight, 26 percent above last year, for the largest Michigan crop since 1938. Favorable weather, combined with irrigation, brought about record yields--10 hundredweight per acre above the previous record. The quality of the crops was very good but prices weakened in the face of the large quantity of supplies.

Total fruit production increased to 632,500 tons in 1984, an increase of 18 percent. Both apples and cherries increased in production, with production of tart cherries almost tripling. Only grapes declined in production due to freeze damage. Fruit size was reduced by the dry weather but quality generally improved over the previous year.

Livestock producers gained some assistance from lower feed grain costs late in the year, as prices declined after the PIK program. This helped increase the profitability of livestock operations. However, an oversupply in beef cattle and milk production continued to depress profits and even created loss situations.

Dairy production was down in 1984 reflecting a new price support system that encouraged production cutbacks. The failure of beef demand to respond as rapidly as it normally does to rising income has resulted in a difficult situation for cattle farmers, both nationally and in Michigan in 1984. Egg prices fell sharply during the year, ending the reasonably good profitability early in the year.

Overall, the number of farms in Michigan declined in 1984 to 63,000, a reduction of 1,000 (see appendix table C-33). However, the number of acres in the state that are currently being farmed remained at 11.4 million as farms in Michigan grew larger. Michigan's average farm is now 181 acres, which is 17.5 percent larger than the average size in 1974.

Table 31

Prices Received by Michigan Farmers, 1984
(Per Unit)

Month	Corn (Bu.)	Wheat (Bu.)	Oats (Bu.)	Dry Beans (Cwt.)	Soybeans (Bu.)	Potatoes (Cwt.)	Baled Hay (Ton)
Jan.	$3.09	$3.26	$2.22	$23.90	$7.61	$ 6.60	$71.00
Feb.	3.08	3.24	2.20	20.10	7.10	8.10	71.00
Mar.	3.27	3.30	2.12	22.40	7.64	8.30	58.00
Apr.	3.32	3.43	2.08	20.30	7.74	8.70	68.00
May	3.41	3.40	2.20	22.00	8.20	8.45	68.00
June	3.47	3.36	2.04	20.90	7.70	8.50	68.00
July	3.42	3.14	1.85	21.30	6.77	12.00	48.00
Aug.	3.16	3.18	1.84	21.00	6.28	9.30	48.00
Sept.	3.05	3.20	1.82	20.40	6.13	4.80	53.00
Oct.	2.67	3.20	1.83	21.80	6.30	4.30	48.00
Nov.	2.58	3.30	1.89	18.80	6.04	4.85	60 00
Dec.	2.48	3.17	1.87	20.20	5.74	4.75	48.00
Avg.	$3.08	$3.27	$2.00	$21.09	$6.94	$ 7.39	$59.08

Month	Hogs (Cwt.)	Beef Cattle (Cwt.)	Steers & Heifers (Cwt.)	Slaughter Cows (Cwt.)	Calves (Cwt.)	Wholesale Milk (Cwt.)	Eggs (Doz.)
Jan.	$48.80	$46.20	$57.60	$36.10	$51.70	$13.80	$.85
Feb.	45.30	46.40	56.30	39.70	58.20	13.50	.80
Mar.	45.60	51.10	58.90	43.40	60.20	13.50	.59
Apr.	46.40	50.90	57.60	42.50	59.40	13.30	.75
May	47.00	49.00	55.60	41.30	56.20	13.20	.52
June	48.80	51.30	56.80	41.70	58.70	13.00	.45
July	50.60	49.60	57.20	39.10	53.30	13.00	.47
Aug.	49.20	48.70	56.10	38.40	51.50	13.10	.44
Sept.	45.50	46.70	55.30	36.00	53.00	13.50	.45
Oct.	43.80	46.50	54.10	36.10	52.00	13.90	.42
Nov.	47.80	46.40	56.60	34.70	48.00	14.30	.50
Dec.[1]	49.00	47.50	56.20	35.80	47.30	13.30	.43
Avg.	$47.32	$48.20	$56.53	$38.74	$54.13	$13.45	$.56

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[1] December 15th price.

Source: Agriculture Across Michigan, U.S. Department of Agriculture and the Michigan Agricultural Reporting Service, selected issues.

The Agricultural Outlook

The economic outlook for agriculture for the balance of 1985 and early 1986 suggests that many of the problems experienced in 1984 will persist. While 1985 should see some reduction in debt ratios, debt burdens are large enough to remain a problem for several years. Average farm prices are projected to increase only one percent in 1985. Although this low level of farm price increases is helpful in restraining inflation, it is too low to solve the problems of high farm debt and declining land prices. Prices for many crops are estimated to be little changed over 1984 levels, while beef and pork prices are expected to decline and then recover to price levels slightly above 1984 levels.

Farm income is receiving some assistance from the relatively low increases of prices for such farm inputs as fuel, fertilizers and purchased feeds. Interest rates are also lower, on average, in 1985 than they were in 1984. These factors should be enough to maintain 1985 income from farm operations at 1984 levels even though opportunities for increases are quite limited. Net proprictor's income from farms is estimated at $263.7 million in 1985.

In response to the continuing financial strain facing state farmers, the State of Michigan passed Public Act 12 of 1985 and additional legislation to provide up to $139 million in below-market loans for crop planting, livestock and farm operations through Michigan financial institutions. The Michigan Department of Agriculture also provides technical assistance to state farmers through the Michigan Agricultural Assistance Network, a hot-line to assist with farm financial problems.

Because 1985 net farm income is expected to be approximately the same as in 1984, 1985 is another year of low profitability for Michigan farmers. Little money is available for modernization or expansion and returns are low to farm operators. On average, however, farms in Michigan should have positive rates of return.

One relatively bright spot for Michigan farmers has been the slower rate of decline in farmland values in Michigan than in some of the other Midwest states. This relationship is continuing in 1985 because Michigan farmland values did not rise as rapidly during the inflationary boom; Michigan agriculture is more diversified and has more part-time farmers than other Midwest states, and alternative uses for farmland are somewhat greater in Michigan. For these reasons, the overall financial condition of Michigan agriculture should remain relatively sound, compared to other areas of the Midwest, as the readjustment to a less inflationary and more competitive environment continues.

Agriculture

Uncertainty continues to surround federal agricultural policies. The Reagan administration proposed large cuts in federal spending for agriculture in the fiscal 1986 budget with the express purpose of reducing the importance of the federal government in farm markets. However, congressional opposition to the proposals and the weak farm economy suggest that farm programs are likely to continue near their present spending levels above $7-$8 billion, far above the levels of the early 1980s. Government farm programs are now faced with a difficult dilemma. Efforts to increase domestic farm prices will hinder exports, while too rapid a downward adjustment of farm prices to current conditions could cause the failure of many farm operations in the United States. Overall, agriculture is generally benefiting from lower interest rates, which should help both in lowering direct costs and in lowering the value of the dollar.

Crop prospects continue to be good both in Michigan and nationally in 1985. A good production year in 1985 will cause large carryovers into 1986. Because of stronger worldwide production in 1985, exports will continue at such levels that on-farm prices will generally continue to lag inflation. This means that the financial readjustments in agriculture will continue into 1986. No major crisis should result but the downward pressure on farm profits will continue. A weaker dollar by 1986 should help agricultural exports, and livestock farmers should face better demand conditions relative to supply.

ENERGY AND MINERAL INDUSTRIES

The Situation in 1984

Energy supplies were adequate to Michigan industries in 1984. Oversupplies in crude petroleum and natural gas caused some price declines and helped hold down energy prices. This relative price stability has been helpful to traditional manufacturing industries in Michigan. However, declines in gasoline prices in recent years have helped encourage the sale of larger cars, making it more difficult for several domestic automobile manufacturers to continue to meet federal fuel economy standards.

Metal supplies of steel and nonferrous metals such as copper, aluminum, lead and zinc have continued to be adequate. Generally, oversupplies prevailed in world markets, depressing prices and causing severe competition for domestic producers of these commodities. Increased price competition and adequate supplies were helpful to metal fabricators, such as the automotive industry, in containing costs and improving profitability. However, supplier stability came into question as several steel firms sought protection under Chapter 11 bankruptcy proceedings, and mine and mill closings in many metal production operations increased the dependence on foreign supplies, particularly of nonferrous metals. As far as Michigan mineral producers are concerned, economic developments in 1984 were sufficient to bring about improvements in both production and prices, although not full recovery.

Energy Supplies Plentiful in 1984

Energy consumption in Michigan increased significantly in 1984 while the prices for energy remained stable or declined. Construction of the Midland Nuclear Power Plant was stopped during the year. In addition, federal price controls on new natural gas wells were eliminated in 1984.

The state's energy dependence increased in 1984, due to both declining oil production and increased energy use. Michigan imported nearly 90 percent of its energy needs from other states and nations. Crude oil production within the state totaled an estimated 31 million barrels and estimated natural gas production totaled 144.7 billion cubic feet.

Michigan businesses and residents spent an estimated $15.4 billion for energy in 1984, with energy imports accounting for about $7.6 billion of this total. If additional energy conservation measures such as increased building insulation and other energy savings measures were more extensively adopted, over $1 billion of the amount paid to import energy could be saved annually. Energy conservation reduces the dollars leaving Michigan and generates new jobs by creating a greater demand for goods and services provided by contractors and suppliers within the state.

Legislation enacted in 1984 provides a means for local governments and community colleges to finance efforts to cut their energy costs. The legislation allows energy-efficiency improvements to be financed using installment contracts or money which may be borrowed by resolution of the governing council, board, or commission. It also permits shared saving contracts where the cost of purchasing and installing energy efficiency improvements is paid from a percentage of the future energy cost savings resulting from the conservation measures.

State government sponsors a number of programs which reduce the transfer of money from Michigan's economy to large energy-producing states and nations. These programs result in energy conservation actions that reduce energy use year after year. Grants totaling $2.5 million were awarded to improve energy efficiency in schools and hospitals in 1984. An additional 18,900 low income homes were weatherized through a Michigan Department of Labor program during the year.

Coal

Coal represents just over a quarter of the energy supply used in Michigan. The state burned an estimated 32 million tons of bituminous coal in 1984. About 79 percent of this coal was used to generate electricity and industry used about 20 percent, mainly to produce coke used in making steel. Residential and commercial purposes accounted for less than one percent. The majority of the coal used in Michigan comes from Ohio, West Virginia, Kentucky, and Tennessee. The remainder, about 18 percent, is from Montana. During 1984, the price of coal averaged about $44 per ton for Michigan utilities and $48 per ton for industrial users, excluding coke-producing plants. This is a slight decrease from 1983 when the average price per ton was $45 for utilities and $51 for industrial users.

Crude Oil

Decreased competition among oil-producing countries, due to expanded production by non-OPEC countries and a continued low demand for oil in world markets, held crude oil prices stable in 1984. Worldwide oil demand remained low because of increased conservation and weak economic conditions in Europe and Latin America. In January 1984, world crude oil prices averaged $28.61 per barrel. By January 1985, prices had begun to decline and averaged $28.33. This decline was followed by OPEC's decision to discontinue the $29 per barrel benchmark price for Arabian light oil used for pricing other grades of OPEC crude oil. The benchmark price was replaced by a new system which bases the price on the differences between light and heavy grades of crude oil.

These changes in world oil prices have a direct effect on the price of refined petroleum products sold in Michigan and on the price obtained from the sale of Michigan crude oil. Michigan sweet crude oil was selling for about $29 in early 1984, before falling to $26.50 a barrel in mid-January 1985.

The United States used approximately 16 million barrels of oil per day in 1984, 30 percent of which was imported. Almost two-thirds of the imports came from non-OPEC sources. U.S. dependence on imported oil has generally declined since 1978, primarily because of a reduced demand for oil and, to a lesser extent, a nearly constant level of domestic production. Demand for oil fell, both because of greater conservation and efficiency in its use and the economic recession of the early 1980s. Although demand for petroleum increased in the United States in 1984, it was still below the level in 1981.

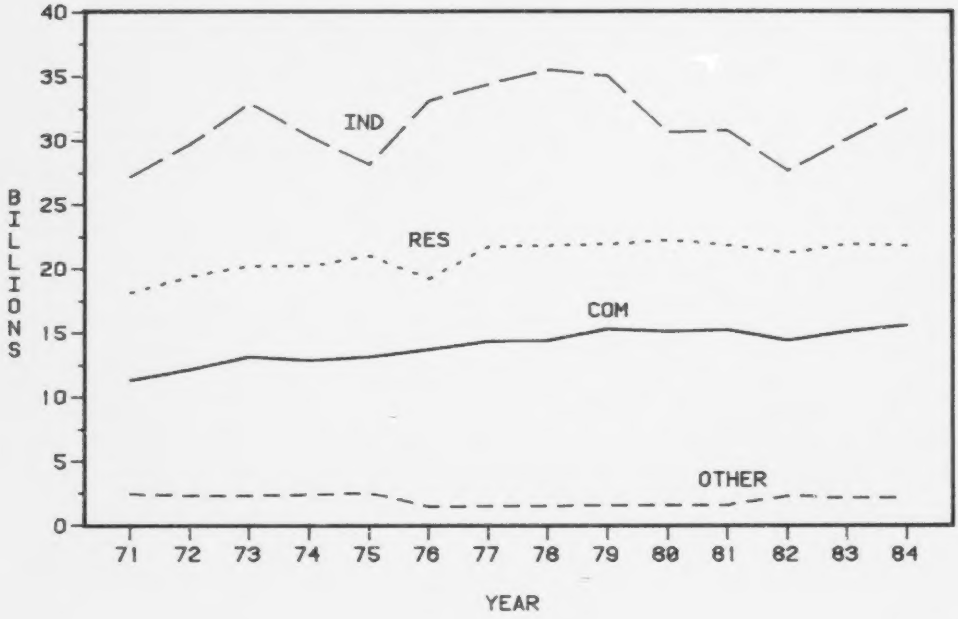
Electricity

In 1984, electric sales in Michigan increased by 4.3 percent to 72,243 million kilowatt hours. The major factor in the rise in demand was a 7.9 percent increase in the use of electricity for industrial purposes (see Chart 12). Commercial usage increased by a much smaller percentage, while a small decline was recorded for residential use. The industrial and commercial increases largely reflected the improving economy, although usage was still below the levels of 1978 and 1979. The reduction in residential electric sales reflected slightly less air conditioning used in the summer of 1984 plus improved efficiency of appliances.

The consumption pattern was similar for the two leading Michigan utilities: kilowatt hour usage increased 6.2 percent while the number of customers rose less than one-half percent

Chart 12

Michigan Electric Sales, 1971-1984



(see Table 32). Table 33 shows that the largest increase in dollar sales is estimated to have occurred in industrial demand with much lower rates of increase in the commercial resale and residential classes. Rate increases contributed to the rise in the value of electric power sales during 1984. The rate increases resulted from construction of new capacity rather than from increasing fuel costs. In general, fuel costs were stable to slightly lower during the year.

Residential costs for Consumers Power Company rose to 6.3 cents per kwh at 500 kilowatt hours in August 1984, up from 5.7 cents the previous year. This increase was due to fuel cost increases and general rate relief. During the balance of 1984, Consumers Power Company rates held nearly constant. Detroit Edison residential customers paid 7.1 cents per kwh in August 1984, up 0.6 of a cent from the previous year because of the Belle River Power Plant coming on line. Only minor changes in cost occurred through the rest of the year.

Under these conditions of moderate demand growth and relative price stability, electric supplies--consisting of internal generating capability and the ability to readily purchase power--remained adequate throughout 1984.

Table 32

Energy Sales and Customers in Michigan, 1983 and 1984[1]
(Millions)

Source	1983	1984 (Estimate)	Percent Change
Electric Companies			
Electric Power Sales (kwh)	57,762	61,355	6.2
Generating Capacity (kilowatts)	14.9	14.9	---
Net Plant Investment	$ 13,239	$ 14,431	9.0
Customers (thousands)	3,113	3,126	0.4
Gas Companies			
Gas Energy Sales (cu. ft.)	632,334	676,669	7.0
Estimated Reserves (cu. ft.)	3,700,000	3,600,000	- 2.7
Net Plant Investment	$ 1,639	$ 1,614	- 1.5
Customers (thousands)	2,208	2,236	1.3

[1] These figures are based on Michigan's two largest electric providers (Consumers Power and Detroit Edison) and the two largest gas service providers (Michigan Consolidated Gas and Consumers Power). These companies account for over 90 percent of Michigan's total electric and gas service.

Source: Michigan Department of Commerce, Public Service Commission.

Table 33

Regulated Public Utility Revenues, 1983 and 1984[1]
(Thousands)

Revenues	1983	1984 (Estimate)	Percent Change
Electric			
Commercial Sales	$ 924,047	$ 993,570	7.5
Industrial Sales	1,341,514	1,495,675	11.5
Residential Sales	1,238,671	1,265,341	2.2
Other (including resale)	195,421	209,588	7.3
Total	$3,699,653	$3,964,174	7.2
Gas			
Commercial Sales	$ 769,866	$ 804,786	4.5
Industrial Sales	700,883	776,374	10.8
Residential Sales	1,718,903	1,748,779	1.7
Other (including resale less refunds)	136,680	132,897	- 2.8
Total	$3,326,332	$3,462,836	4.1

[1] These figures are based on Michigan's two largest electric providers (Consumers Power and Detroit Edison), and the two largest gas service providers (Michigan Consolidated Gas and Consumers Power). These companies account for over 90 percent of Michigan's total electric and gas service.

Source: Michigan Department of Commerce, Public Service Commission.

Natural Gas

Natural gas sales increased by 7 percent in 1984 to 676,669 million cubic feet (see Table 32). The major reason for this increase was an improving state economy, although slightly colder winter weather also played a part. This increase in consumption reversed a decline in natural gas usage during the recession of the early 1980s when customers reduced overall consumption, switched to other fuels and began to practice conservation measures.

The importance of the improving economy and fuel switching in the increased demand for natural gas is shown by the 10.8 percent rise in industrial sales of natural gas (see Table 33). Industrial sales are the most sensitive to changes in economic activity and to changes in relative prices of alternative fuels because industrial customers often have equipment to burn more than one fuel. Commercial sales increased by less than one-half the amount of industrial sales, while residential sales rose only 1.7 percent in 1984. The growth in dollar sales was restrained by the oversupply of gas, which caused natural gas prices for residential users consuming 150 million cubic feet to drop about 5.7 percent from fall 1983 to fall 1984, resulting in an average residential bill of $876.

As noted, 1984 was characterized by a surplus of natural gas supplies at the wholesale and production levels. The only supply concern arose from Consumers Power Company's weakened financial condition because of the high cost of the discontinued Midland Nuclear Power Plant. For 1984, this problem was resolved when Consumers Power sold bonds to raise money needed to purchase gas for winter storage.

Distillate Fuel Oil

Fuel oil consumption, including kerosene, number one and number two fuel oil, and diesel fuel, increased 11 percent to an estimated one billion gallons in 1984. Most of the increase was attributable to increased industrial use. During the first half of 1984, diesel fuel use averaged 28 million gallons a month, but this average decreased to 24 million in the last half of 1984. The demand for fuel oil depends heavily on the level of economic activity because industrial and transportation uses (trucks, railroads, ships) account for about 70 percent of the distillate fuel oil consumed. The level of residential and commercial use depends primarily on winter weather. In January 1984, number two home heating oil, excluding sales tax, cost $1.07 per gallon. Prices declined to $1.06 per gallon by December 1984.

Gasoline

Gasoline sales in 1984 showed a strong increase over sales in 1983. Sales in 1984 totaled 4 billion gallons, an increase of 5.7 percent over 1983. These sales are, however, substantially below the sales peak reached in 1978 when Michigan's residents and businesses consumed 5 billion gallons of gasoline. (These figures include both taxed and nontaxed gallons.) One reason for the 1984 increase was a rise in vehicle miles traveled, which more than offset improvements in average fuel efficiency of automobiles. Michigan's vehicle fleet averaged an estimated 17.4 miles per gallon in 1984, compared to 16.7 miles per gallon in 1983.

Gasoline prices remained stable in 1984, reflecting the stability of world crude oil prices. The average price of unleaded gasoline began in 1984 at $1.21 per gallon, rose slightly to $1.23 by April, and declined by the end of the year to $1.16.

Mineral Supplies Adequate as Economic Recovery Continues

Mineral supplies were generally adequate in 1984 with many mineral commodities in sufficient oversupply to depress prices. The strong dollar helped make imported minerals and metals less costly, thus encouraging competition and holding down prices. This situation affected copper, aluminum and many grades of steel. The comparatively weaker recovery of the European and Latin American economies also encouraged imports of these commodities to the United States. As a result of these supply and import pressures, nonferrous metal prices advanced by only 0.4 percent in 1984 despite modest price increases early in the year. Normally prices in these industries are advancing at this point in the business cycle. Iron and steel prices did rise 3.9 percent from 1983 to 1984 despite a very competitive situation. Although the steel industry received some protection from the trigger price system, the import share continued to rise, bringing calls for further trade protection.

Michigan mineral producers enjoyed a reasonably good year with the value of mineral production rising 4.1 percent to $2,824.7 million in 1984 in an environment of low inflation (see Table 34). Fuel minerals, almost exclusively oil and natural gas, constituted 49.2 percent of Michigan mineral production. Metallic minerals, almost entirely iron ore, made up 21.9 percent of production in 1984, while nonmetallic minerals, mostly materials for the construction, chemical, and agricultural industries, made up the remaining 28.8 percent.

The Michigan iron mining industry recovered from the recession and is performing fairly well, when the overall condition of the steel industry and value of the dollar is considered. Production was up 21 percent in 1984. Production in 1983 had already increased from the recession low of 1982. Equally encouraging is the fact that most of this production appears to be for shipments rather than for building stockpiles.

Table 34

Michigan Mineral Production, 1983 and 1984

	1983			1984			Percent
Mineral	Quantity	Value (Millions)	Percent of Total Value	Quantity	Value (Millions)	Percent of Total Value	Change in Value 1983-84
Metallic							
Copper: recoverable content, including silver (short tons)	-0-	$ -0-	-0-	5	$ 7.0	0.2	n.a.
Iron Ore: usable, gross weight (thousand long tons)	10,713	508.0	18.7	12,974	613.0	21.7	20.7
Total Metallic Value		$ 508.0	18.7		$ 620.0	21.9	22.0
Nonmetallic							
Fuels							
Natural Gas (million cu. ft.)	154,500[1]	$ 540.7[1]	19.9	144,695	$ 536.8	19.0	- 0.7
Petroleum (thousand 42-gal. barrels)	32,278	930.3	34.3	30,980	854.1[1]	30.2	- 8.2
Subtotal Fuel Value		$1,471.0	54.2		$1,390.9	49.2	- 5.4
Other Nonmetallics							
Clay (thousand short tons)	1,199	$ 5.7	0.2	1,352	$ 5.3	0.2	- 0.7
Gypsum (thousand short tons)	1,097	8.1	0.3	1,218	10.0	0.4	23.5
Lime (thousand short tons)	503	23.1	0.9	557	29.0	1.0	25.5
Cement & Natural Brines (bromine, calcium chloride, iodine & magnesium)	n.a.	356.0	1.3	n.a.	405.1	14.3	13.8
Peat (thousand short tons)	215	4.3	0.2	223	4.8	0.2	11.6
Salt (thousand short tons)	1,355	93.3	3.4	1,160	89.5	3.2	- 4.1
Sand/Gravel (thous. short tons)	26,545	79.9	2.9	30,640	94.0	3.3	17.6
Construction[1]	23,000	52.3	1.9	27,200	66.5	2.4	27.2
Industrial	3,545	27.6	1.0	3,440	27.5	1.0	- 0.4
Stone	24,767	82.3	3.0	26,804	88.1	3.1	7.0
Crushed (thousand short tons)	24,763	82.2	3.0	26,800	88.0	3.1	7.1
Dimension (thousand short tons)	4	0.1	—	4	0.1	—	—
Subtotal Other Nonmetallic Value		$ 734.9	27.1		$ 813.8	28.8	10.7
Total Nonmetallic Value		$2,205.9	81.3		$2,204.7	78.1	- 0.1
Grand Total		$2,713.9	100.0		$2,824.7	100.0	4.1

[1] Estimate.

n.a. Not applicable.

Source: U.S. Bureau of Mines and Michigan Department of Natural Resources, Geological Survey Division.

An historic footnote is that the Groveland Mine was permanently closed in October 1984. The mine had been on standby basis for a number of years. This brings to a close, at least for the next few years, iron mining in the Menominee Range, once a major world iron ore producer. Current Michigan iron ore production now comes exclusively from the Marquette Range in Marquette County.

Oil production declined slightly during the year, as the falling production from older Niagaran trend wells was not fully offset by new discoveries. Crude oil prices were $1.27 per barrel lower than in 1983, reflecting worldwide conditions that weakened oil prices. Natural gas discoveries were not sufficient to maintain production, resulting in a decline of 6.3 percent. Prices for this production rose a few cents despite a generally surplus situation.

The recovery in construction helped major construction materials gain in both quantity produced and value. These included gypsum, construction sand and gravel, and crushed stone. It should be noted that much crushed stone is used for flux in the iron industry. The Grand Rapids gypsum mines, idle since 1981 opened in February 1984. However, salt production declined in the face of continued weak demand. The value of nonfuel, nonmetallic minerals rose 10.7 percent in 1984. Overall, the mineral-producing industries of Michigan enjoyed a continued recovery during 1984 despite a few weak spots.

Energy and Minerals Outlook

According to the U.S. Department of Energy, energy consumption is expected to increase 2.1 percent nationally for 1985. Michigan's overall energy use will also show a slight increase. This estimate assumes continued economic growth, as reflected in a projected 3.1 percent increase in real gross national product and a decline in world oil prices of about 2.8 percent from 1984 levels. This drop in oil prices occurred in the first quarter of 1985 and prices are dropping further in the face of world oversupply, which is expected to continue through the end of the year. U.S. oil imports are currently providing about 29 percent of domestic demand in 1985.

In 1985, motorists are seeing the effects of legislation enacted last year requiring the labeling on retail pumps of gasoline additives such as alcohol. In addition, motor fuel quality standards and a testing program aimed at protecting consumers are being implemented by the Weights and Measures Division of the Department of Agriculture.

The U.S. Environmental Protection Agency began a phase-down in the lead content of regular gasoline in 1985. During 1984, about 36 percent of all gasoline sold in Michigan was leaded regular. On July 1, 1985, the allowable lead content was reduced from the current average of 1 gram per gallon to 0.5 grams, with a further reduction to 0.1 grams per gallon scheduled for January 1, 1986. In order to meet the phase-down after 1985, refineries may replace lead with other octane enhancers, such as alcohol and ether.

Detroit Edison began commercial operation of Unit II of the new coal-fired Belle River Power Plant in 1985. The first unit began operation in 1984, but was shut down for generator repairs from February to July 1985. Edison has the 1,100 million watt Fermi II Nuclear Power Plant undergoing test production in late 1985 and has requested the Public Service Commission to allow the inclusion of both plants in its rate base.

Natural gas supplies are expected to be adequate with prices stable or showing a slight decline in 1985. Beginning January 1985, natural gas produced from wells drilled since April 1977 was no longer subject to federal price controls. In response to a survey of interstate pipeline companies on the effects of decontrol, most felt prices would remain stable throughout the year, due to current market conditions.

In 1985 mineral supplies are generally very good. Supplies of petroleum are expected to be adequate throughout the entire year. Financial difficulties of some OPEC members and several large non-OPEC producers, such as Mexico, combined with conservation and rising non-OPEC production, have weakened world oil prices. This is likely to result in some price decline for petroleum products during the year. However, a sharp drop in world oil prices to $20 per barrel is unlikely because of the strengthening worldwide demand due to improved economic conditions and the fall in the dollar. A drop to $25 remains possible. The only risks of shortage in 1985 and 1986 appear to arise from the Iranian-Iraqi war which could interrupt oil flow from the Persian Gulf. By 1986, it is possible that some shortage of low-lead gasoline may occur because of changed regulation but this should be very minor. The world petroleum outlook for 1986 also suggests an adequate supply and only minor price changes. Only a sharp fall in the dollar or a noneconomic disruption of oil supply would cause a large price increase.

Oil and gas production in Michigan is declining slightly because of the maturity of the Niagaran trend wells. Despite relatively stable oil prices, Michigan is enjoying considerable drilling activity. This activity gives hope of stemming the decline in production and perhaps reversing the decline in hydrocarbon production in future years, with prospects appearing best for future natural gas discoveries.

Supplies of metallic minerals and metals to Michigan industries also appear adequate or in surplus. Price increases in 1985 are estimated to be minimal for most of these commodities. While metal supplies are expected to be adequate in 1986, price increases may average about 5 percent for these commodities, due to the weaker dollar and decreased stockpiles of copper, nickel and several other metals.

The iron and steel situation is expected to remain depressed through 1985. However, import protection was increased early in 1985 with additional quotas and anti-dumping tariffs. Generally, this type of protection encourages the importation of partially finished products to evade the trade restrictions. Michigan may be adversely affected since trade protection for the steel industry has increased, while protection for the automotive industry was reduced by the federal government's failure to seek extension of the voluntary import restraints on Japanese automobiles. While assistance to workers in import-impacted industries is necessary and illegal dumping of imported goods must be prevented, such actions must be implemented in such a way as to not disadvantage one domestic industry while assisting another. In general, the steel supply situation still appears to be one of overcapacity which is restraining price increases this year. However, by 1986, capacity reductions and import restraints could allow substantial price increases for this commodity.

In 1985, production can be expected to increase slightly at the iron mines currently operating but not sufficiently to allow more mines to open. The outlook for copper production remains uncertain, but the White Pine Mine is expected to reopen for mining. Nationally both copper and iron ore production is constrained by foreign competition and relatively low prices. Quarry products, used in construction, are enjoying moderate growth reflecting continued moderate levels of construction activity.

TRANSPORTATION

Transportation Developments in 1984

A good transportation system is an important component of any growing economy. The better a transportation system, the easier and more efficient it is to move people and to distribute goods and services. Assisting economic development is one of the most important objectives of many improvements to Michigan's statewide transportation network of state highways, county roads, city streets, airports, railroads and intercity and intracity passenger services. A recently completed (1984) four-year study of Michigan's transportation needs concluded that preservation of existing systems, rather than expansion, should be the focus of all state transportation programs through the mid-1990s. To this end, it recommended that nine of every ten transportation dollars should be spent to maintain and improve the transportation system that is already in place. Revenues going into the Michigan Transportation Fund (MTF), the major fund supporting transportation programs in Michigan, increased 17.6 percent in fiscal 1984 over the previous year to $856.1 million. This increase was due to both a gas tax rate increase and strong economic growth, which spurred higher motor fuel consumption and more vehicle registrations. The gasoline tax rate increased by two cents per gallon to 15 cents, effective January 1, 1984, and gasoline consumption increased 5 percent in 1984. In addition to the growth in MTF revenues, two bond sales totaling $110 million provided additional funds to finance public transportation and highway projects. These increased transportation revenues helped to support needed improvements and repairs in the state transportation system.

Highways

An intensive program to rehabilitate Michigan's 9,500-mile state highway system continued in 1984. For the second straight year, improvements proceeded at a faster rate than the existing system deteriorated. Due to a successful effort to obtain more than $100 million in federal funds over and above Michigan's regular obligational authority, contract awards for work on state highways totaled a record $354 million. The main emphasis continues to be repairing and upgrading existing highways rather than building new ones.

Major projects included opening 40 new miles of I-69 connecting Lapeer and Port Huron and major resurfacing and pavement recycling jobs on I-94, I-96, I-75 and US-23 freeways. In mid-1985, the section of I-69 around Lansing's north side was opened. Work continues on the US-131 freeway between Big Rapids and Cadillac and on the final 7.9 miles of I-696 freeway in south Oakland County. Work on a section of I-69 east from Lansing is to begin in late 1985.

Aeronautics

Travel aboard commercial air carriers in Michigan rose to a record high in 1984. The number of boarding and deplaning passengers at the 23 Michigan airports with scheduled airline service totaled 14.04 million, topping the previous record of 13.97 million set in 1979 and exceeding the 11.73 million passengers in 1983 by 19.7 percent. Detroit Metropolitan Wayne County Airport again accounted for about three-fourths of the total passenger volume, while Kent County International Airport (Grand Rapids) passed the one million total for the first time. Bishop Airport (Flint) and Kalamazoo Municipal Airport also showed large percentage gains while two of the state's busier airports, Tri-County (Saginaw) and Capital City (Lansing), reported small declines.

In addition to air passengers, the number of airplane departures and arrivals at Michigan's 14 airports where traffic is governed by Federal Aviation Administration (FAA) control towers totaled nearly 1.8 million, an increase of 6.7 percent over 1983. The number of control tower operations in the state in 1984 were lower than the record 2.18 million set in 1979 at the 15 airports then having FAA control towers.

The world's first unrestricted public-use Microwave Landing System (MLS) was commissioned in August 1984 at Wexford County Airport in Cadillac. A second system scheduled for operation this year has been installed at Kirsch Municipal Airport in Sturgis. The MLS precision approach systems will eventually replace the long-used Instrument Landing Systems. Small communities were chosen for the MLS sites as an aid in attracting air service and new firms to the communities.

Intercity Passenger

Intercity passenger transportation services include both railroads and buses. Rail passenger service in Michigan entered its second decade of development with introduction of the "Pere Marquette," a new state-assisted West Michigan Amtrak route linking Grand Rapids with Chicago. From only six Michigan cities with Amtrak service in 1973, intercity rail passenger service now operates through 21 Michigan cities, serving more than 500,000 state travelers a year. Major track and signal improvements continued along the Detroit-Chicago corridor, allowing 80 mile per hour passenger train speeds by the six daily trains using this route. Deregulation continued to affect the intercity bus industry in Michigan. Many new regular-route services were started because of easier access requirements while some routes were discontinued. Michigan travelers have benefited from private carriers taking advantage of deregulation to experiment with new regular routes and specialized passenger services such as worker-commuters, special weekend service for college students, and charters and tours.

Local Public Transportation

Urban bus systems operate in Ann Arbor, Battle Creek, Bay County, Benton Harbor, Detroit, Flint, Grand Rapids, Jackson, Kalamazoo, Lansing, Muskegon, Niles, Port Huron and Saginaw. Ridership on the Detroit area systems rose 5 percent to 77.25 million in 1984. This follows a 19 percent decline in 1983. The other urban systems increased ridership slightly, from 24.6 million in 1983 to 25 million in 1984.

In addition to the urban bus systems, 41 nonurban bus systems operate in Michigan. In 1984 twelve county-wide "new-service" systems completed their third year of service and began receiving statutory operating assistance. This helped increase nonurban bus system ridership by 9 percent to 3.14 million. With the continued reduction in federal funds going to local transit systems, additional local funding will be required to maintain the current operating levels of these systems. Transit millage proposals were approved in Crawford, Gogebic, Huron, Isabella, Leelanau, Marquette, Ontonagon, Oscoda and Roscommon Counties and in the City of Niles in 1984.

Rail Freight and Water

In 1984 significant strides were made to improve the efficiency and effectiveness of the state's freight system. The improvements were important in keeping the state freight program responsive to federal deregulation of the freight transportation industry. The successful attraction of the Mazda Motor Corporation auto plant to southeast Michigan was in part based on the commitment to continued road and rail improvements.

Early in the year, the $11.7 million purchase of 342 miles of railroad right-of-way formerly leased from the Penn Central Corporation was completed. The purchase made the State of Michigan the owner of 879 miles of railroad or 17 percent of the total railroad miles in the state. Fiscal year 1985 is the last year that state operating subsidies will be provided to three shortline railroads.

Several significant water transportation issues were resolved during the year, including sale of the Upper Peninsula Shipbuilding Company shipyard at Ontonagon and its unfinished tug and barge system. The yard, which was closed in July 1982 in a contract dispute, was reopened by the new owner, Wedtech Corporation, employing more than 100 workers. Water freight transportation through the Port of Detroit continued to grow, with tonnage totaling 22,843,000 tons, the best year since 1979.

Transportation Outlook

Highway projects will continue to focus on maintenance of the existing system, including resurfacing of many miles of roads and highways, the rehabilitation of Detroit area freeways and continued work on the Zilwaukee Bridge, which is expected to be completed in 1987. In addition, construction will continue to complete the last segments of Michigan's part of the interstate highway system, I-69 and I-696, and the US-131 freeway should be opened to traffic between Big Rapids and Cadillac.

The preliminary estimate of motor fuel tax revenue is a 9.2 percent increase for fiscal 1985 due to increased consumption and the full year effect of the two-cent increase in the tax rate, which was only in effect for nine months in fiscal 1984. Vehicle registration revenues are expected to rise 9.1 percent in fiscal 1985 to $279.1 million. This growth is attributable to the 0.6 percent increase in vehicle registrations and the indexing of passenger car weight tax rates to the percent change in Michigan personal income. Overall, Michigan Transportation Fund revenue is expected to increase 8.9 percent to $932.6 million in fiscal year 1985. In addition to the increase in transportation revenues, the state expects to continue receiving the higher level of federal aid stemming from the 1982 Surface Transportation Assistance Act.

HOUSING AND CONSTRUCTION

National Trends

Construction activity in the U.S. was a major contributor to strong overall economic growth in 1984. Real construction expenditures increased 13.8 percent in 1984, slightly faster than the 13.3 percent gain in 1983 and more than twice the 6.8 percent growth rate in real GNP in 1984. The value of residential construction, in real terms, increased 12.3 percent in 1984. Almost all of the growth occurred in the first quarter of 1984, with residential construction actually falling at a 5.5 percent annual rate in the second half of the year. Private, nonresidential construction increased 13 percent in 1984; however, the rate of growth slowed substantially in the third quarter before rebounding in the final quarter.

Total housing starts in 1984 were 1.78 million units compared to 1.7 million in 1983 and 1.06 million in 1982 (see Table 35). In 1984, 38.8 percent of housing starts were multiple units. This was slightly higher than the share of multiple unit starts of 37.7 percent in 1983, but substantially higher than the 30.9 percent in 1980. Among new single-unit structures, 17.6 percent were townhouses, substantially higher than the shares of 13 percent in 1982 and 9.1 percent in 1980. The recent recession and high mortgage rates of the past five years have made single-family homes less affordable, and changing household composition and demographic factors have all contributed to the increase in the ratio of new multiple-unit dwellings to single-family homes. The increased number of persons living alone has also contributed to the demand for rental, multiple-unit housing.

The fastest growing categories in private, nonresidential construction were office buildings and other commercial structures. Construction of manufacturing plants also increased in 1984, but electric utility construction declined. Manufacturing capacity utilization rates improved in 1984 creating a need for new construction, and higher profits provided much of the needed financial resources. The value of office building construction increased 20 percent in 1984, surpassing the previous record level set in 1982. Strong institutional and foreign investment in office construction continued in 1984, despite rising office building vacancy rates, especially in the Southwest.

Table 35

U.S. New Private Housing Starts, 1973-1984
(Thousands)

Year	Housing Starts	Percent Change
1973	2,045.3	- 13.2
1974	1,337.7	- 34.6
1975	1,160.4	- 13.3
1976	1,537.5	32.5
1977	1,987.1	29.2
1978	2,020.3	1.7
1979	1,745.1	- 13.6
1980	1,292.2	- 26.0
1981	1,084.2	- 17.1
1982	1,062.2	- 2.0
1983	1,703.0	60.3
1984	1,776.9	4.3

Source: Construction Review, U.S. Department of Commerce, Bureau of Industrial Economics, Construction and Building Products Division, selected issues.

The value of public-works construction (highways, schools, military facilities, sewer systems, water supply facilities, community development, and EPA construction) increased 7 percent in 1984, reversing the long-term decline which began in 1968 with the completion of the interstate highway system and the reduction in school-age population. The deterioration of public facilities, particularly highways, in recent years has received considerable public attention and contributed to the 1984 increase in public-works construction.

Recent Trends in Michigan

The cyclical pattern in Michigan construction activity is evident in Table 36 and Chart 13. Residential building permits in Michigan increased sharply in 1984 for the second consecutive year. The 1984 increase of 29.5 percent to 28,000 units was substantially higher than the increase in the national rate of 4.3 percent.

Table 36

Michigan Residential Building Permits, 1974-1984

	Private[1]				
Year	Single Family	Multi-Family	Public	Total	Percent Change
1974	26,481	17,710	100	44,291	-37.8
1975	26,653	10,121	116	36,890	-16.7
1976	32,331	13,564	-0-	45,895	24.4
1977	41,314	17,370	-0-	58,684	27.9
1978	43,384	17,687	-0-	61,074	4.1
1979	33,959	15,298	48	49,305	-19.3
1980	17,870	11,106	852	29,828	-39.5
1981	11,876	6,885	312	19,072	-37.4
1982	8,466	5,706	103	14,276	-25.8
1983	14,844	6,579	215	21,638	59.4
1984[2]	17,332	10,575	123	28,030	29.5

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[1] A housing unit is a single room or group of rooms intended for occupancy as separate living quarters by a family, a group of unrelated persons living together, or a person living alone.

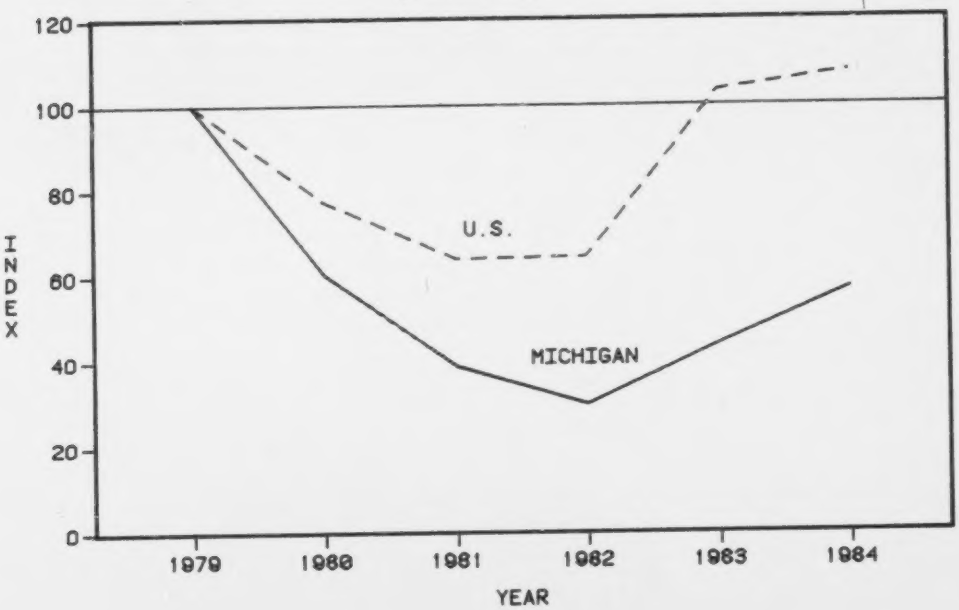
[2] Preliminary.

Source: Construction Review, U.S. Department of Commerce, Industry and Trade Administration, November/December 1984, and Construction Reports, C40-84-12, U.S. Department of Commerce, Bureau of the Census, January 1985.

Following the national trend, Michigan residential building permits declined continually from 1979 to 1982. In 1982, the number of permits issued for single-family homes was the lowest recorded level in Michigan construction history. Despite the dramatic increase in the number of permits in 1983 and 1984, construction activity is still below the 1979 level reached prior to the recession. As Chart 13 shows, Michigan's decline in construction activity during the recession was much more severe than in the U.S. as a whole. (The building permit indexes are based on a reference point of 100 in 1979.) It also shows that in 1984 the recovery in Michigan's housing industry still lagged the national recovery, as state housing construction remained below the 1979 level while U.S. construction exceeded the 1979 level.

Chart 13

Index of Building Permits for the U.S. and Michigan, 1979-1984 (1979=100)



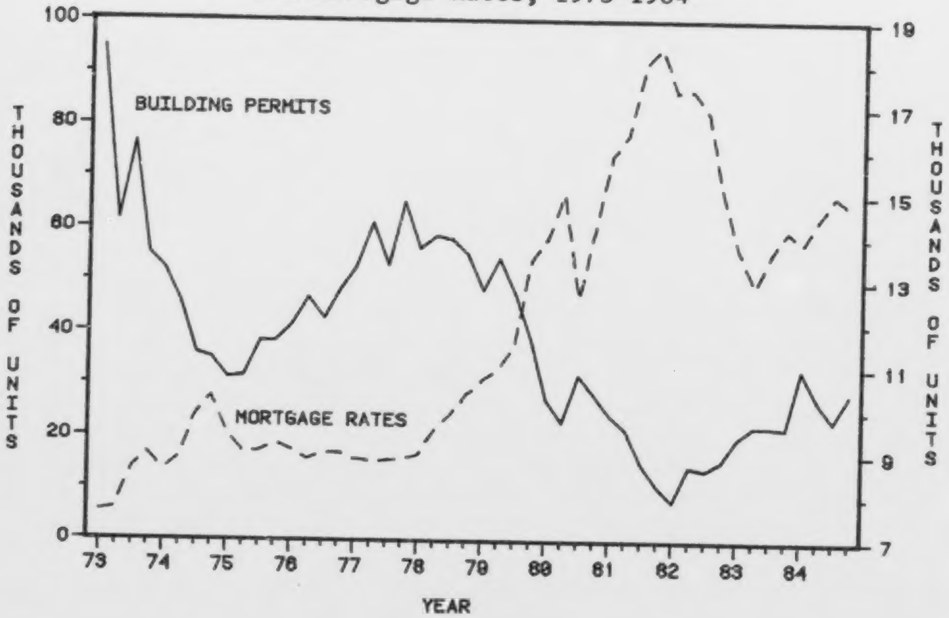
According to the U.S. Census Bureau, total housing units in Michigan increased 21.3 percent between 1970 and 1980, although the population increased only 4.4 percent. Despite low growth in population, the number of households increased dramatically (20.4%) between 1970 and 1980 due to several demographic changes. Between 1970 and 1980, families with both parents and two children living together decreased 9.3 percent, while single-parent households headed by females increased 91 percent. Households with individuals living alone or with unrelated persons rose 70 percent and accounted for 25 percent of total households in 1980. On the other hand, households with both parents present decreased from 72.2 percent of all households in 1970 to 61 percent in 1980. These demographic changes, along with federal tax incentives for home ownership and the desire for larger homes and greater amenities, resulted in a strong growth in demand for housing during the decade.

The increase in nonfamily households would normally be expected to generate more demand for multiple-unit housing. However, the 1980 U.S. census shows that despite an overall increase in rental housing units between 1970 and 1980 (28.7%), the number of households in rental apartments decreased (2.5%) while those renting single-family units increased (86%). However, between 1979 and 1984 the number of multiple-unit housing permits increased from 29 to 37.9 percent of total permits. A critical factor in the increasing relative importance of multiple-unit housing was the sharp increase in mortgage interest rates which began in 1978 and peaked at over 18 percent in the second half of 1981. Many potential homebuyers were kept out of the market by the historically high level of interest rates.

As Chart 14 shows, mortgage rates declined from the November 1981 peak of 18.7 percent to a low of 12.8 percent in June 1983 before rising again in 1984. Building permits responded inversely to these interest rate movements. After permits reached their lowest level at the end of 1981 and the beginning of 1982, they rebounded to a level of 34,000 units in early 1984. The number of permits fell until the fourth quarter of 1984 when mortgage interest rates declined.

Chart 14

Michigan Residential Building Permits
and Mortgage Rates, 1973-1984



One of the most recent developments in housing is the increase in the number of mobile homes as an alternative to conventional housing. Michigan households in mobile homes increased from 65,400 units in 1970 to 145,900 units in 1980. However, the shipment of mobile homes to Michigan fell from 8,139 units in 1979 to only 3,147 units in 1982, before increasing to 5,000 units in 1983. In 1984 the number of new mobile homes increased 44 percent to 7,200 units. Nationally, the number of new mobile homes increased only 3.5 percent in 1984.

Geographic Variation

In 1984 most counties in Michigan experienced an increase in new housing starts for a second consecutive year following the 1979-1982 recession. As Table 37 shows the greatest gain took place in metropolitan areas. New housing units increased by an estimated 33.8 percent in metropolitan areas and 17.3 percent in nonmetropolitan areas in 1984. In 1983 the increase in the number of new housing units in metropolitan areas (76.4%) was even more dramatic when compared with nonmetropolitan areas (8.4%).

Larger metropolitan areas, which include two or more counties, experienced more growth in new housing than one-county metropolitan areas in both 1983 and 1984. Within larger metropolitan areas, counties containing central cities also experienced gains in new housing, but gains in fringe counties (129.2%) were more dramatic than in any other area in Michigan in 1983. In 1984 housing gains in fringe counties of larger metropolitan areas were about the same as the state average of 29.5 percent.

The increase in the number of new housing units in fringe counties of metropolitan areas is a return to the past trend in population growth in suburban areas which was interrupted by substantial population losses during the recession. Between 1970 and 1980 there was a strong migration to fringe metropolitan areas. During the recession the number of permits for new housing units in fringe areas decreased from 17,630 units in 1979 to only 3,669 units in 1982, a drop of 80 percent. As a result, population gains experienced in the 1970s in fringe areas changed to either no growth or a decline in population. It appears that high mortgage rates discouraged existing homeowners in urban centers from moving to suburban areas, and the lack of employment opportunities caused migration from both central and fringe metropolitan areas to other parts of the country.

Despite the strong overall recovery of the housing industry in Michigan in the past two years, the number of authorized new housing units in 1984, in both metropolitan and nonmetropolitan areas, was still substantially below the level experienced in 1979. As shown in Table 37, new housing units authorized in 1984 were 61 percent of the 1979 level in metropolitan areas and only 46.5 percent of the 1979 level in nonmetropolitan areas. Even the fringe areas that experienced substantial growth in new housing units in 1983 and 1984 were still 38 percent short of the 1979 level in 1984.

Table 37

New Housing Units Authorized in Michigan Areas, 1979-1984

Areas	1979	1980	1981	1982	1983	1984[1]
Metropolitan	35,215	19,837	11,970	9,128	16,057	21,481
Multiple Counties	28,144	15,054	9,012	7,416	13,583	17,531
Central	10,514	5,526	4,070	3,747	5,174	6,634
Fringe	17,630	9,528	4,942	3,669	8,409	10,897
Single Counties	7,070	4,783	2,958	1,712	2,474	3,950
Nonmetropolitan	14,090	9,991	7,102	5,148	5,581	6,549
State Total	49,305	29,828	19,072	14,276	21,638	28,030

[1] Preliminary estimate.

Source: U.S Bureau of the Census, "Housing Units Authorized by Building Permits and Public Contracts," Construction Reports, Series C-40, 1979-1984.

Nonresidential and Public Construction

The improving economy in 1984 is clearly evident in the sharp rebound in nonresidential and public construction shown in Table 38. Nonresidential building construction contract awards increased by 60.3 percent in value to a level of $2,049.2 million in 1984. Based on current dollar values, 1984 new nonresidential building reached a record high. However, in terms of constant dollar value, the level of construction in 1984 fell short of the 1979 level by 26 percent.

Table 38

Michigan Construction Contract Awards, 1967-1984
(Thousands)

Year	Nonresi-dential	Resi-dential	Total Building	Public Works & Utilities	Total Construction
1967	$ 946,513	$1,020,000	$1,966,513	$ 357,000	$2,323,513
1968	912,849	1,029,581	1,942,430	407,537	2,349,967
1969	962,697	891,531	1,854,228	874,715	2,728,943
1970	955,592	942,760	1,898,352	1,052,245	2,950,597
1971	874,058	1,319,978	2,194,036	840,719	3,034,755
1972	1,010,891	1,596,633	2,607,524	842,780	3,450,304
1973	1,206,481	1,856,354	3,062,835	1,299,276	4,362,111
1974	1,355,623	1,314,147	2,669,770	791,628	3,461,398
1975	951,139	1,089,145	2,040,284	1,146,796	3,187,080
1976	1,111,835	1,481,164	2,592,999	592,738	3,185,737
1977	1,525,733	2,144,489	3,670,222	604,463	4,274,685
1978	1,752,267	2,469,130	4,221,397	1,821,304	6,042,701
1979	1,975,434	2,392,063	4,367,497	889,324	5,256,821
1980	1,970,299	1,535,367	3,505,666	667,944	4,173,610
1981	1,336,850	1,122,958	2,459,808	798,406	3,258,214
1982	1,179,900	869,400	2,049,300	487,100	2,536,400
1983	1,277,674	1,448,964	2,726,638	763,678	3,490,316
1984[1]	2,049,178	1,909,549	3,958,727	966,470	4,925,197

[1] Preliminary.

Source: F. W. Dodge Division of McGraw-Hill Information Systems Company, special release.

Public works and utility construction increased 26.6 percent in dollar value in 1984, following a 56.8 percent increase in 1983. This growth is in sharp contrast to the over 45 percent drop in the value of public construction from 1979 to 1982 reflecting the severity of the prolonged recession in Michigan. In real terms, the value of contract awards in 1984 was 23 percent below the 1979 level.

Outlook for Housing and Construction

In 1984, housing construction in both Michigan and the United States continued the recovery which began in 1983. However, even after two years of recovery, constant-dollar new residential, nonresidential, and public-works construction was only 67 percent of the total contract value in 1979. Employment in the construction sector in 1984 also was only 69 percent of the 1979 level.

Housing construction is closely linked to home buyers' ability to purchase housing which is determined by employment conditions and mortgage rates. Falling mortgage interest rates and continued improvement in employment conditions are both contributing to a 1985 rebound in Michigan housing construction. Preliminary data suggest that new residential housing units in 1985 will increase by more than 30 percent above the 1984 level. Spending for public works and utilities should continue to expand with the revenue base for state and local governments. The growth rate in nonresidential construction will be reduced below the 1984 figure by a slowing of the growth rate in production and corporate profits and by a weakening in capacity utilization rates.

INTERGOVERNMENTAL ISSUES AND LOCAL RESOURCES

Revenue Sharing Payments Reflect Economic Recovery

State revenue sharing continues to be a significant source of revenue for general purpose local units of government. A total of $573.6 million was distributed to Michigan's cities, villages, townships and counties under the program in fiscal year 1984. Twenty-three percent of this total was distributed to townships, 64 percent to cities and villages, and 13 percent to counties.

The fiscal year 1985 distributions under the state revenue sharing program are based on a percentage of sales tax, income tax and single business tax collections in 1984 and 1985. Growth in these tax revenues resulted in an increase in state revenue sharing of 14.7 percent in fiscal year 1985 as compared to a 16.5 percent growth in revenue sharing payments in fiscal year 1984. In fiscal year 1986, the lower estimated growth rates for tax collections will result in a projected 8.1 percent increase in shared taxes over fiscal year 1985 distributions.

In fiscal year 1985 an estimated $656.4 million of state shared revenue will be distributed to local governments, 22 percent to townships, 65 percent to cities and villages and 13 percent to counties. Total revenue sharing funds shifted slightly in favor of cities and villages in fiscal year 1985. This was caused by a modest shift in population from townships to cities and villages, as a result of incorporations. This shift in shared revenues is expected to continue in fiscal year 1986 with the completion of $3.1 million in annual census delay payments made primarily to townships in 1985. In state revenue sharing fiscal year 1985, revised procedures, which eliminated certain special assessments from the calculation of relative tax effort to conform with the provisions of the State Revenue Sharing Act, also reduced the percentage increase in state revenue sharing distributed to townships below the percentage increase in distributions to cities and villages. A fiscal year 1985 supplemental payment has been proposed to offset this unexpected loss for the localities affected.

Both population and general property tax data are used to determine the distribution of state shared revenues to local units. In fiscal year 1985, 62 percent of total state revenue sharing will be distributed on a per capita basis, with the remainder distributed using the relative tax effort formula. This formula distributes shared revenues to local units in direct relationship to local general property, income and excise tax collections. Table 39 presents per capita and per tax dollar amounts received by cities, villages and townships in fiscal year 1984 and preliminary estimates for fiscal year 1985.

Table 39

State Shared Revenue Per Capita and Per Tax Dollar, 1984-1985

	Fiscal Year 1984	Fiscal Year 1985
Cities and Villages	$368,818,000	$429,978,000
Per capita	65.83	76.46
Per tax dollar[1]	0.31	0.35
Townships	$130,356,000	$142,244,000
Per capita	35.77	39.26
Per tax dollar[1]	0.88	0.95

[1] Calculated by dividing state shared revenues by the sum of general property, income, and excise taxes levied by local units.

Source: Michigan Department of Management and Budget.

Because cities have a greater total population and a higher average tax rate than townships, they collect a larger portion of state shared revenues under both payment formulas. Table 39 shows that total state revenue sharing payments in fiscal year 1984 were almost twice as great for cities and villages than for townships when measured on a per capita basis--about the same as the division of population. In contrast, Table 39 shows that in fiscal year 1984, townships received close to three times as much shared revenue for each local tax dollar collected as cities and villages. Because only 38 percent of state revenue sharing is distributed using the relative tax effort formula, which assists communities with greater service requirements, cities and villages receive less total revenue sharing per tax dollar collected than townships.

The statewide average tax effort rate that is applied to state revenue sharing has fluctuated between 13.26 mills and 13.56 mills since 1980. During this period, the average property tax rate for cities fluctuated between 16.24 and 17.21 mills, for villages between 11.68 and 12.37 mills, and for townships between 3.02 and 3.51 mills.

Counties are recipients of income tax revenues on a per capita basis. These payments rose 9 percent in fiscal year 1984 and 13 percent in fiscal year 1985 and are projected to increase 6 percent in fiscal year 1986.

Local governments continue to receive single business tax revenues as reimbursement for a 1975 tax exemption on inventory property. In fiscal year 1984, $100.8 million was paid, increasing to $101.7 million in 1985 and $102.4 million in 1986.

Property Taxes

The property tax is the most important source of revenue to local governments in Michigan, accounting for 41 percent of local general revenues in fiscal year 1983. Nationally, property taxes accounted for 28.8 percent of local revenues in 1983. In 1984, almost $5.4 billion in property taxes was collected in Michigan. While the property tax is the major source of revenue for all local governments, its importance to different types of local units varies considerably. School tax revenues constituted 70 percent of general property taxes collected in 1984. While most local tax rates decreased, the average school tax rate increased in 1983 and 1984, as the rate of growth in property values slowed sharply.

The gradual decline in city-collected general property taxes, as a percentage of the total collected by local governments, mirrors the increasing share of school tax revenues. Since 1974, the city share of the total has dropped 5 percentage points while the school share has increased by the same amount. The average millage rate of city property taxes was 16.38 mills in 1984 and has declined steadily from the 1976 peak of 18.19 mills (see appendix tables C-39 to C-43).

Village property taxes have remained a constant 0.6 percent of the total over the past decade. The average millage rate has climbed slightly since 1982 to 12.13 mills in 1984, though it has generally been dropping since the 1971 level of 12.90 mills. Township property taxes have established a plateau at 2.8 percent of total general property taxes collected, after reaching a high point in 1981 at 3.2 percent. The township average millage rate also reached its highest point in 1981 at 3.51 mills and has now dropped to 3.02 mills.

County property taxes, like city property taxes, have declined steadily since 1970 as a percentage of total property taxes collected, though the decline has slowed over the last nine years and has settled around 11.2 percent. The average tax rate of counties has fluctuated the least of all local units of government, with a variation of only 0.3 mills in the last 15 years. At 6.02 mills in 1984, it is at the low end of this range.

Property values, as measured by the state equalized valuation of property, have increased 81 percent since 1976, while inflation increased 82 percent. Township state equalized valuation of property has grown 106 percent over the decade, while village state equalized valuation of property has increased by 89 percent--only slightly higher than the average. Cities have experienced the lowest rate of growth in the tax base since 1976, at 61 percent.

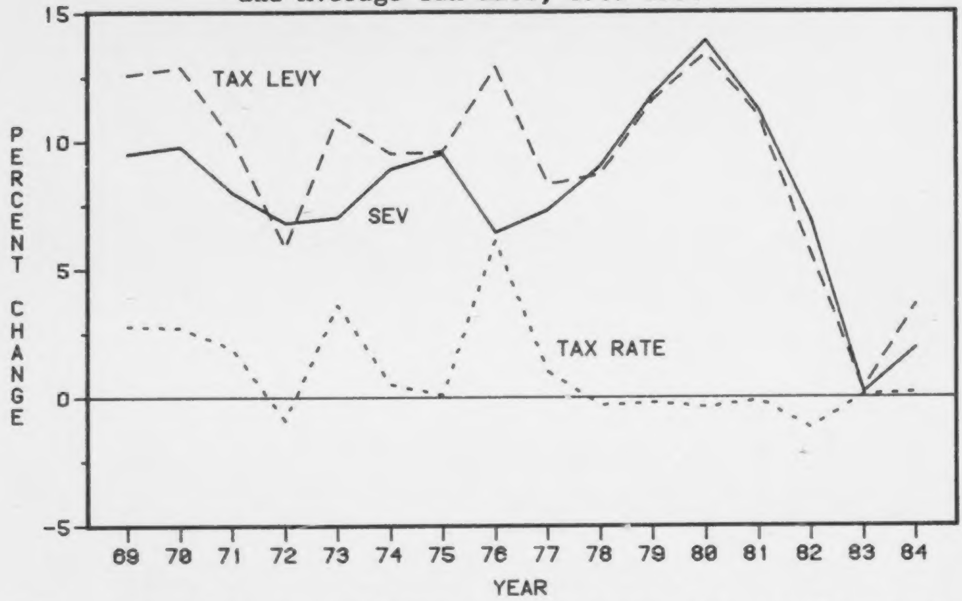
From 1976 to 1984 the greatest growth in the tax base has taken place in townships, with cities experiencing only slightly over half the amount of growth in the same period. In line with growth in property values, townships show a 90 percent increase in property tax revenues and cities show a 45 percent growth in property tax revenues. Village, city and township tax rates have all decreased by 6 to 10 percent since 1976. The only average tax rate that has increased since 1976 is that of schools which rose 7 percent contributing to a 93 percent increase in school property tax revenues over the same period.

Chart 15 shows percentage changes since 1969 in total state equalized value of property, total property tax collections and the average tax rate. As a result of 81 percent growth in state equalized valuation of property and a one-half percent increase in the average millage rate, property tax collections have risen 81.5 percent since 1976. Property tax rates have generally declined since 1978, as millage rollbacks were implemented to conform with the constitutional tax limitation amendment of 1978 and as property values increased substantially.

As shown in Chart 15, prior to 1978, increases in the property tax levy were due to both increases in the tax rate and growth in the tax base. Since 1978, increases in the tax levy have reflected increases in the tax base with almost no change in the average tax rate. After three years of rising growth, the increase in state equalized valuation of property slowed for three years and dropped to a 0.2 percent increase in 1983. Little or no growth in the local state equalized value of property permitted some local governments to authorize property tax increases in 1983. This caused a modest increase of 0.1 percent in the statewide average property tax rate, following five years of decline. A modest increase in the tax rate was also recorded in 1984.

Chart 15

Percent Change in State Equalized Value, Property Tax Levy, and Average Tax Rate, 1969-1984



NOTE: 1976 data is adjusted to eliminate the effect of the exemption of inventory property from local taxation beginning in 1976.

Source: Michigan Department of Treasury, State Tax Commission.

State Financial Assistance to Local Governments

Table 40 presents detail on state financial assistance to local units of government for fiscal years 1984 and 1985. The total estimated for 1985 is $2.24 billion, an increase of 16 percent over the 1984 total of $1.92 billion. Programmatic grants provided the greatest growth from fiscal year 1984 to fiscal year 1985, an estimated 23 percent increase. A 4 percent increase is projected in state assistance to general purpose local units in fiscal year 1986. State revenue sharing will be the major source of this increase with anticipated growth of 8 percent over fiscal year 1985. State spending to all local units of government, including school districts, junior and community colleges and regional or special purpose public agencies totaled $3.58 billion in fiscal year 1984. The estimated total for fiscal year 1985 is $4.06 billion.

APPENDIX A

SUMMARY OF 1984 ECONOMIC EVENTS

SUMMARY OF 1984 ECONOMIC EVENTS

FIRST QUARTER

Federal Budget. The Reagan administration proposed a $924 billion fiscal 1985 federal budget with a deficit of $186 billion. Independent estimates of the deficit exceed $200 billion.

Stock Prices Fall. Stock prices took their biggest plunge in 15 months in February, with the Dow Jones Industrial Average falling 24.19 points to 1156.30, as Treasury Secretary Donald Regan and Federal Reserve Board Chairman Paul Volcker warned that continued economic growth could be threatened by growing federal deficits.

Prime Rate. Major banks raised their prime rate in March to 11.5 percent from 11 percent, the first increase since August 1983.

Real GNP. Real GNP increased at a 10.1 percent annual rate in the first quarter. First-quarter auto sales increased 37 percent over year-earlier levels, while the "Big Three" auto companies reported 1983 profits of $6.3 billion.

SECOND QUARTER

Interest Rates. The prime rate was raised in April to 12 percent and in May to 12.5 percent. By June most major banks increased their prime rate to 13 percent, the highest level since October 1982. In April the Federal Reserve increased the discount rate to 9 percent from 8.5 percent. Interest rates on Michigan fixed-rate mortgages increased to 15.02 percent.

Installment Credit. Consumer installment credit was up to a record level of $10.2 billion in May.

Mergers. General Motors Corporation agreed to purchase Electronic Data Systems Corporation for an estimated $2.55 billion; Standard Oil of California paid $13 billion to acquire Gulf Oil.

Real GNP. Real GNP grew at an annual rate of 7.1 percent in the second quarter led by a 21.4 percent surge in business fixed investment.

Bank Assistance. The FDIC and a group of banks agreed to provide Continental Illinois Bank and Trust Company of Chicago with $2 billion to stop an international run on the bank holding company. The aid package also included a $5.5 billion line of credit from other banks.

Oil Prices. Iran cut its oil price by between $1.50 and $2 a barrel to revive oil exports which had been reduced by months of attacks on ships in the Persian Gulf.

THIRD QUARTER

Consumers Power. Consumers Power cancels construction of the Midland nuclear plant, after investing $4 billion.

Value of the Dollar. The dollar rose to more than three West German marks in September. It was the first time the dollar reached the three-mark level since 1973. For the quarter, imports of goods and services exceeded U.S. exports by $90.6 billion at an annual rate.

Steel Imports. Steel imports hit a record 2.7 million tons in July, 33 percent of the U.S. market.

Auto Industry. Stock prices of all three major auto companies increased on the strength of record third quarter profits. New car sales averaged 10.3 million units for the quarter.

Record Trading. Trading on the New York Stock Exchange hit a record 237 million shares on August 3.

Prime Rate. On September 27th the prime rate was lowered to 12.75 percent from 13 percent by most major banks.

Accelerated Income Tax Rollback. The Michigan personal income tax rate was reduced by 0.75 percentage points to 5.35 percent as of September 1, providing an additional $184 million annually in tax reductions to citizens throughout the state in 1984.

Labor Contract. United Auto Workers and General Motors agreed on a contract after a one-week strike at key plants.

Table 40

State Financial Assistance to Local Units of Government, 1984 and 1985
(Dollar Amounts in Thousands)

Source of Revenue	Estimated Expenditures 1983-84				Appropriations and Estimated Distributions 1984-85			
	Cities & Villages	Townships	Counties	Total	Cities & Villages	Townships	Counties	Total
Unrestricted State Shared Revenue								
Sales Tax	$169,466	$109,950	$ —	$ 279,416	$187,558	$120,613	$ —	$ 308,171
Income Tax	125,842	9,249	74,431	209,522	144,201	9,531	84,139	237,871
Census Delay Adjustment	711	2,360	—	3,071	711	2,359	—	3,070
Intangibles Tax	5,828	3,679	—	9,507	5,847	3,638	—	9,485
Single Business Tax	66,971	5,118	—	72,089	91,661	6,103	—	97,764
Total	$368,818	$130,356	$ 74,431	$ 573,605	$429,978	$142,244	$ 84,139	$ 656,361
Restricted State Revenue								
Michigan Transportation Fund	$156,473	$ —	$ 280,755	$ 437,228	$172,875	$ —	$ 310,066	$ 482,941
Other	5,328	1,220	404	6,952	5,727	1,230	410	7,367
Total	$161,801	$ 1,220	$ 281,159	$ 444,180	$178,602	$ 1,230	$ 310,476	$ 490,308
Programmatic Grants								
Mental Health	$ —	$ —	$ 500,295	$ 500,295	$ —	$ —	$ 632,118	$ 632,118
Public Health	14,874	—	28,239	43,113	13,369	—	25,600	38,969
Social Services	—	—	100,131	100,131	—	—	121,111	121,111
Other	69,579	1,287	65,320	136,186	82,507	1,901	73,668	167,872[1]
Total	$84,453	$ 1,287	$ 693,985	$ 779,725	$ 95,876	$ 1,901	$ 852,497	$ 960,070[1]
Reimbursement for Property Exempt from Taxes								
Single Business Tax Inventory	$ 67,287	$ 4,620	$ 28,847	$ 100,754	$ 67,802	$ 4,795	$ 29,112	$ 101,709
Other	4,605	853	12,686	18,144	4,692	870	16,181	21,743
Total	$ 71,892	$ 5,473	$ 41,533	$ 118,898	$ 72,494	$ 5,665	$ 45,293	$ 123,452
Other Reimbursement	$ 4,351	$ 265	$ 8	$ 4,624	$ 4,812	$ 213	$ 300	$ 5,325
Total—General Purpose Local Units	$691,315	$138,601	$1,091,116	$1,921,032	$781,762	$151,253	$1,292,705	$2,235,516[1]
Total—All Local Units				$3,575,106				$4,057,900

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[1] Does not add across. Allocations to local units cannot be estimated for Michigan Youth Corps grants.

Source: Michigan Department of Management and Budget.

Real GNP. Real GNP rose at only a 1.6 percent annual rate in the third quarter, down sharply from the 8.6 percent rate of increase in the first half of 1984.

FOURTH QUARTER

Prime Rate. The prime rate was lowered in several steps from 12.75 percent in October to 10.75 percent in December, the low for the year.

Oil Prices. Britain unexpectedly cut its crude oil price by $1.35 a barrel in October. Norway and Nigeria followed, putting additional downward pressure on world oil prices. OPEC said it would reduce daily production by 1.5 million barrels in an effort to bolster sagging oil prices.

VA Mortgage Rate. The VA mortgage rate fell to 13 percent and Michigan's conventional, fixed-rate mortgage loans declined to 14.19 percent.

Michigan Strategic Fund. A Michigan Strategic Fund was created with the authority to invest in new or expanding businesses.

Real GNP. Growth in real GNP rebounded to an annual rate of 4.3 percent in the fourth quarter.

Discount Rate. On November 21 the Federal Reserve cut the discount rate from 9 percent to 8.5 percent with a further reduction on December 24 to 8 percent, the lowest rate since October 1978.

Michigan Research and Development Authority. A Michigan Research and Development Authority was created as a means to promote research activities in the state at public and private colleges and universities.

Steel Industry. In December, Japan agreed to limit steel exports to the U.S. U.S. employment in the steel industry was reported at the lowest level in over half a century.

U.S. Dollar. The U.S. dollar reached an all-time high against several major foreign currencies. Including a $25.5 billion deficit in the fourth quarter, the U.S. trade deficit reached a record $101.5 billion in 1984.

APPENDIX B
SELECTED PUBLIC ACTS
OF 1984

SELECTED PUBLIC ACTS OF 1984

BANKING AND FINANCE

Credit Union Car Loans (P.A. 60)
Extends the 16.5 percent interest rate ceiling on credit union car loans.

Home Improvement (P.A. 101)
Allows a maximum annual finance charge of up to 16.5 percent on the unpaid balance on home improvement contracts entered into before December 31, 1987.

Bond Sales (P.A. 215)
Increases the bonding limit for the Michigan State Housing Development Authority and broadens its scope to include housing for middle-income groups.

Banks (P.A. 250)
Allows banks from foreign countries to establish agencies within the state.

College Investments (P.A. 299)
Expands the list of investment opportunities available to community colleges to include bankers acceptances, commercial paper, mutual funds and repurchase agreements.

Auto Loans (P.A. 359)
Maintains the interest rate ceiling on auto loans from savings and loan associations.

Interest Rate Ceiling on Mortgages (P.A. 416)
Extends for another year--until December 31, 1985--the current interest rate ceiling on secondary mortgages by small loan companies.

ECONOMIC DEVELOPMENT

Economic Development Act (P.A. 86)
Allows the 1980 Economic Development Act to take effect in a city with more than 750,000 people even if the city had not established a subsidiary neighborhood development corporation implementing housing projects.

Payments to School Districts (P.A. 122)

Requires the state to pay in-formula school districts school aid payments which are no less than the industrial and commercial facilities taxes credited to the School Aid Fund.

Commercial Redevelopment Act (P.A. 342)

Provides local units of government with the authority to extend property tax exemptions granted for less than 12 years up to a maximum of 12 years under the Commercial Redevelopment Act.

Small Business (P.A. 198)

Provides for the creation of incubation centers for small business.

Shopping Redevelopment Areas (P.A. 250)

Allows the use of special assessments in city shopping redevelopment areas for security promotion and operation along with currently allowable construction and maintenance projects.

Strategic Fund (P.A. 270)

Creates a Michigan Strategic Fund to encourage increased employment and economic growth by combining existing funds and by providing increased authority to invest in new or expanding businesses.

Job Development Authority Act (P.A. 384)

Extends the sunset date to December 31, 1986 for the removal of agricultural and commercial facilities from the Job Development Authority Act.

Research and Development Authority (P.A. 385)

Creates a Michigan Research and Development Authority as a means to promote research activities in the state within public and private colleges and universities and as a means to encourage cooperation between research and development activities and private enterprise.

EMPLOYMENT

Conservation Corps (P.A. 22)

Provides minimum wage jobs for 500 persons aged 18-25 in a work training program to conserve and improve state national resources.

Job Training (P.A. 156)

Allows the Department of Social Services to enter into contracts with private employers to provide job training programs for welfare recipients.

Youth Corps (P.A. 220)

Continues the summer Youth Corps program which provides jobs to unemployed persons aged 18-21.

ENERGY

Oil Production (P.A. 51)

Amends the Michigan Unitization Act to help increase the secondary production of oil by streamlining the regulatory process.

Utility Users (P.A. 349)

Extends and allows for an increase in the city utility users tax currently levied in Detroit with a portion of the revenues earmarked to retain or hire police officers.

Loans (P.A. 378)

Provides general amendments and extends the sunset date on the energy conservation loan program for residential customers of electric and gas utilities.

STATE AND LOCAL GOVERNMENT

Rules (P.A. 273)

Requires state agencies to take small business interests into account when promulgating rules and to actively involve them in the rule-making process.

State Purchasing (P.A. 279)

Requires the state to pay three-quarters of one percent per month on late payments from the state.

Medicaid (P.A. 333)

Clarifies the deductions of claims and prohibitions under the Medicaid False Claims Act. False claims would specifically include the "knowing submission" of claims for goods or services which were not medically necessary in accordance with professionally accepted standards.

Delinquent Tax (P.A. 313)

Limits the interest rate charged to local units for delinquent social security taxes to no more than the rate charged to the state by federal law.

NATURAL RESOURCES

Forest Products Industry (P.A. 150)

Creates a Forest Products Industry Development Council in the Department of Natural Resources charged with advising on forest products development, providing assistance to improve the industry and assure a stable timber supply, and promoting the industry.

Natural Resources (P.A. 204)

Creates the state's first policy for peat mining on state land and requires that revenues from the mining in excess of $250,000 go to the Recreational Land Acquisition Trust Fund.

TAXATION

Income Taxes

Income Tax Rate Rollback (P.A. 221)

Accelerates the 0.75 percentage point rollback of the personal income tax rate to 5.35 percent as of September 1, 1984. Additionally, returns the rate to the previous 4.6 percent rate as of October 1, 1987.

Social Security Exemption (P.A. 284)

Preserves the exemption of social security income from taxable income under the state income tax, even though a portion of it will be subject to federal taxation.

Exemption for the Deaf (P.A. 415)

Allows an income tax exemption for deaf persons equal to that allowed other handicapped persons.

Gleaning (P.A. 417)

Extends the gleaning of agricultural fields tax credit until 1990.

Credit for Public Broadcasting Systems (P.A. 419)
Limits the 50 percent income tax credit for contributions to public broadcasting systems and institutions of higher education to those located within the state.

Property Taxes

Tax Deferment (P.A. 31)
Includes agricultural real property regardless of classification in deferment from payment of summer property taxes.

(P.A. 205)
Permits property owners with incomes of up to $20,000 rather than $10,000 to defer payment of summer taxes.

Home Heating Credit (P.A. 36)
Extends and restructures the home heating tax credit which was scheduled to expire at the end of 1983.

Equipment Exemption (P.A. 206)
Exempts from the property tax all equipment used in harvesting wood, including that used in clearing land, cutting trees for lumber or other commercial purposes, and in transporting trees and products made from trees.

Property Used by Organizations (P.A. 305)
Specifies that property used by for-profit organizations in conjunction with special events for which the business pays a fee would not be assessed a specific tax in lieu of property taxes.

Interest on Summer Property Taxes (P.A. 399)
Allows local collecting units to waive interest on summer property taxes for certain persons including senior citizens and the disabled.

Sales Taxes

Credit for Vehicle Trade-ins (P.A. 76)
Allows a sales tax exemption on the purchase of new vehicles equal to 30 percent of the value of a trade-in at new or used car dealers. Applies to purchases between March 1, 1984 and February 1, 1985.

(P.A. 303)
Allows persons who sell their used cars within 30 days after purchasing new vehicles to apply for sales tax refunds until February 1, 1985.

Vehicle Exemption (P.A. 228)
Provides a state sales tax exemption for vehicles purchased in Michigan but titled in another state if the state in which the vehicle is being titled provides reciprocity.

Use Taxes

Marine Fuel (P.A. 164)
Provides that marine fuel taxes be levied at the same rate as motor vehicle fuel taxes.

Aircraft Exemption (P.A. 268)
Exempts aircraft used by Michigan-based carriers, primarily engaged in regularly scheduled passenger transport, from the state use tax.

Single Business Taxes

Workers' Compensation Credit (P.A. 45)
Permits a single business tax (SBT) credit for workers' compensation supplemental payments.

(P.A. 46)
Permits self-insurers and foreign insurers to claim credits against either the insurance premium tax or SBT for workers' compensation supplemental payments.

(P.A. 47)
Permits credits against the insurance premium tax for foreign insurers from workers' compensation supplemental payments.

Liability Ceiling (P.A. 281)
Raises the quarterly tax liability ceiling for determining interest charges for underpayments of the single business tax from $10,000 to $20,000 per year.

Financial Institutions Base (P.A. 360)
Excludes certain interest income and expenses associated with obligations of the U.S. government from the financial institutions business tax base.

TOURISM

Assessment Districts (P.A. 59)

Permits the establishment of tourism assessment districts to promote increased tourism through the efforts of nonprofit tourist and convention bureaus to be financed by assessments on owners of transient facilities and to be administered by the Department of Commerce.

APPENDIX C

STATISTICAL TABLES

LIST OF TABLES

Page

Employment

C-1 Michigan Labor Force and Employment Estimates, 1971-1984 129
C-2 Michigan Labor Force, Employment and Unemployment, Quarterly Averages, 1975-1984 130
C-3 Michigan Manufacturing and Durable Goods Employment, 1975-1984 131
C-4 Michigan Manufacturing and Nondurable Goods Employment, 1975-1984 132
C-5 Michigan Nonmanufacturing Employment, 1975-1984 133
C-6 Public Sector Employment in Michigan, 1970-1984 134
C-7 Michigan MSA and County Employment and Unemployment Rates, 1983 and 1984 135
C-8 U.S. and Michigan Manufacturing Industries, Average Weekly and Hourly Earnings, 1974-1984 137
C-9 Michigan Manufacturing Industries, Average Weekly Earnings, 1972-1984 138
C-10 Michigan Manufacturing Industries, Average Weekly Hours, 1972-1984 139

Income

C-11 Michigan Personal Income by Major Sources, 1975-1984 140
C-12 Michigan Personal Income by Major Sources, Quarterly, 1978-1983 141
C-13 U.S. and Major Industrial States, Personal Income and Real Per Capita Personal Income, 1980-1983 143

Prices

C-14 U.S. Consumer Price Index--All Urban Consumers, 1984 144
C-15 Detroit Consumer Price Index--All Urban Consumers, 1984 145

Page
C-16 U.S. and Detroit Consumer Price Indices, 1971-1984 146
C-17 U.S. and Detroit Consumer Price Indices, and Inflation Rates, 1954-1984 148

Finance and Construction

C-18 New Incorporations in Michigan, 1955-1984 149
C-19 Michigan Liquid Assets, 1970-1984 150
C-20 U.S. Interest Rates, 1962-1984 151
C-21 New Private Housing Units Authorized in Michigan MSAs, 1979-1984 152

Motor Vehicles and Public Utilities

C-22 Motor Vehicle Registrations, 1963-1984 153
C-23 New Passenger Car Sales in Michigan, 1967-1984 154
C-24 State Share of Passenger Car Assemblies, 1972-1984 Model Years 155
C-25 U.S. Motor Vehicle Production, 1976-1984 156
C-26 U.S. Automobile Sales, Truck Sales, Inventories, and Stock, 1958-1984 157
C-27 U.S. and Michigan Motor Vehicle Industry Employment, Earnings, and Hours, 1957-1984 158
C-28 U.S. Automobile Price Indices, Personal Consumption Expenditures and Installment Credit, 1959-1984 159
C-29 U.S. Motor Vehicle Production and Auto Sales, Quarterly, 1978-1984 160
C-30 Rate Changes Granted to Regulated Utilities in 1984 161

Agriculture

C-31 Prices Received by Michigan Farmers, 1973-1984 162
C-32 Michigan Farm Income Components, 1968-1984 163
C-33 Number of Farms, Average Size, and Land in Farms in Michigan, 1956-1984 164

Page

Population

C-34 U.S. and Michigan Resident Population, July 1, 1951--July 1, 1984 165
C-35 Michigan Population by County, 1980-1984 166
C-36 U.S. Population, Ranked by State, 1980 169
C-37 Michigan School Enrollment, Grades K-12, 1975-1988 170
C-38 Michigan Elementary, Secondary, and Higher Education Student Enrollments, 1974-1984 172

Property Taxes

C-39 Michigan Real and Personal Property Values, Taxes and Tax Rates, 1954-1984 173
C-40 Michigan Real and Personal Property Values, by Class, 1971-1985 174
C-41 Michigan State Equalized Property Valuations, by Local Unit of Government, 1970-1984 175
C-42 Michigan General Property Taxes by Local Unit of Government, 1970-1984 176
C-43 Michigan School Property Taxes, 1961-1984 177
C-44 U.S. and Michigan Personal and Per Capita Income, 1960-1984 178
C-45 U.S. and Michigan Real Personal and Per Capita Income, 1965-1984 179

Employment

Table C-1

Michigan Labor Force and Employment Estimates, 1971-1984
(Thousands)

Year	Total Labor Force	Employed[1]	Unemployed[2]	Percent Unemployed	Wage & Salary Workers	Workers in Labor Management Disputes
1971	3,624	3,348	276	7.6	2,995.0	10.7
1972	3,695	3,438	258	7.0	3,118.9	2.8
1973	3,803	3,579	223	5.9	3,284.3	4.9
1974	3,880	3,592	288	7.4	3,277.6	9.9
1975	3,892	3,406	486	12.5	3,136.6	3.5
1976	3,990	3,618	373	9.4	3,283.0	6.4
1977	4,114	3,777	337	8.2	3,442.3	6.9
1978	4,196	3,908	289	6.9	3,609.4	5.4
1979	4,314	3,979	335	7.8	3,637.1	5.2
1980	4,293	3,759	534	12.4	3,442.8	6.0
1981	4,306	3,777	529	12.3	3,364.4	3.0
1982	4,277	3,616	661	15.5	3,193.3	3.7
1983	4,287	3,697	608	14.2	3,223.1	3.0
1984	4,359	3,871	488	11.2	3,343.3	1.1
1983: January	4,257	3,533	724	17.0	3,098.3	0.4
February	4,234	3,536	699	16.5	3,115.7	1.3
March	4,222	3,503	719	17.0	3,133.8	2.1
April	4,283	3,618	666	15.5	3,171.1	0.3
May	4,370	3,730	640	14.7	3,214.7	1.0
June	4,412	3,765	646	14.6	3,237.8	1.4
July	4,393	3,820	573	13.1	3,219.2	1.1
August	4,365	3,780	585	13.4	3,205.4	16.3
September	4,293	3,767	527	12.3	3,293.6	4.1
October	4,232	3,704	528	12.5	3,320.1	3.0
November	4,171	3,683	488	11.7	3,333.8	0.5
December	4,212	3,711	501	11.9	3,333.8	4.2
1984: January	4,146	3,616	530	12.8	3,262.0	0.4
February	4,250	3,714	536	12.6	3,285.5	0.5
March	4,305	3,765	540	12.5	3,311.4	0.2
April	4,344	3,864	480	11.0	3,313.8	0.3
May	4,414	3,915	499	11.3	3,342.6	0.4
June	4,473	3,968	505	11.3	3,347.3	3.8
July	4,507	3,998	509	11.3	3,331.4	4.2
August	4,449	3,990	459	10.3	3,321.5	1.3
September	4,362	3,932	429	9.8	3,390.9	1.1
October	4,372	3,930	442	10.1	3,405.5	0.0
November	4,371	3,904	468	10.7	3,400.6	0.4
December	4,318	3,861	457	10.7	3,407.3	0.7

[1] Includes wage and salary, agricultural and self-employed—excludes striking workers.

[2] Excludes workers not actively seeking work and workers on strike.

Source: Michigan Employment Security Commission.

Table C-2

Michigan Labor Force, Employment and Unemployment, Quarterly Averages, 1975-1984
(Thousands, Seasonally Adjusted)

Year/ Quarter		Labor Force	Employment	Unemployment	Percent Unemployed
1975:	I	3,923	3,397	526	13.4
	II	3,880	3,369	512	13.2
	III	3,869	3,393	476	12.3
	IV	3,895	3,464	431	11.1
1976:	I	3,932	3,557	375	9.5
	II	3,975	3,594	381	9.6
	III	4,023	3,646	377	9.4
	IV	4,029	3,671	358	8.9
1977:	I	4,077	3,728	349	8.6
	II	4,092	3,783	309	7.6
	III	4,118	3,757	361	8.8
	IV	4,167	3,840	327	7.9
1978:	I	4,175	3,900	276	6.6
	II	4,189	3,913	277	6.6
	III	4,183	3,876	306	7.3
	IV	4,235	3,937	298	7.0
1979:	I	4,301	3,993	308	7.2
	II	4,311	3,985	326	7.6
	III	4,307	3,971	336	7.8
	IV	4,336	3,964	372	8.6
1980:	I	4,296	3,872	423	9.9
	II	4,301	3,719	582	13.5
	III	4,286	3,709	576	13.4
	IV	4,291	3,735	556	13.0
1981:	I	4,261	3,724	537	12.6
	II	4,329	3,830	499	11.5
	III	4,313	3,804	509	11.8
	IV	4,324	3,753	571	13.2
1982:	I	4,292	3,641	651	15.2
	II	4,252	3,625	627	14.7
	III	4,280	3,628	653	15.2
	IV	4,288	3,575	713	16.6
1983:	I	4,305	3,634	671	15.6
	II	4,321	3,671	650	15.0
	III	4,284	3,702	581	13.6
	IV	4,242	3,714	528	12.5
1984:	I	4,303	3,808	494	11.5
	II	4,370	3,876	494	11.3
	III	4,369	3,885	484	11.1
	IV	4,398	3,919	478	10.9

Source: Michigan Employment Security Commission.

Table C-6

Public Sector Employment in Michigan, 1970-1984
(Thousands)

Year	Total Government Employment	Federal Government	State Government[1]	Local Government
1970	506.6	57.7	115.9	333.0
1971	509.4	54.8	117.8	336.8
1972	526.8	55.2	122.4	349.0
1973	534.4	55.0	123.9	355.4
1974	562.5	56.2	127.5	378.8
1975	583.1	56.1	132.6	394.4
1976	594.5	55.5	135.1	403.9
1977	596.7	54.7	136.8	405.2
1978	611.4	54.6	143.6	413.2
1979	621.0	56.7	147.7	416.6
1980	627.8	58.2	152.3	417.3
1981	598.4	55.9	147.8	394.7
1982	577.8	55.9	142.2	379.7
1983	569.8	55.9	140.5	373.4
1984	566.5	56.2	138.2	372.1
1983: January	574.7	55.3	143.5	375.9
February	586.0	55.2	146.0	384.9
March	586.8	55.5	144.5	386.8
April	578.1	55.8	145.1	377.2
May	575.7	56.1	136.3	383.3
June	558.7	56.3	131.5	370.9
July	540.8	57.3	129.4	354.1
August	532.6	56.6	129.1	346.9
September	564.0	56.1	143.8	363.2
October	580.8	55.5	147.9	377.4
November	585.6	55.5	149.0	381.1
December	574.3	55.6	139.9	378.8
1984: January	565.8	54.9	142.9	368.0
February	580.4	54.9	146.7	378.8
March	582.0	55.0	146.3	380.7
April	577.3	55.0	145.5	376.8
May	571.9	55.9	137.5	378.4
June	549.0	56.7	127.3	365.0
July	537.6	56.9	126.9	353.9
August	535.6	57.2	127.4	351.1
September	568.2	56.7	137.2	374.2
October	579.1	56.5	143.6	379.0
November	580.3	56.6	143.4	380.3
December	571.2	57.4	134.1	379.6

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[1] In addition to classified civil service employees, state government employment includes employees of state-supported colleges and universities, the legislature and the courts.

Source: Michigan Employment Security Commission.

Table C-7

Michigan MSA and County Employment and Unemployment Rates, 1983 and 1984

Area	1983 Number Employed	1983 Unemployment Rate	1984 Number Employed	1984 Unemployment Rate
Michigan	3,679,000	14.2	3,871,000	11.0
MSA[1]				
Ann Arbor	132,800	9.5	141,200	7.0
Battle Creek	53,500	14.4	56,000	11.1
Benton Harbor	59,500	15.5	62,300	12.4
Detroit	1,742,000	14.6	1,838,900	10.9
Flint	161,600	16.4	169,600	12.2
Grand Rapids	295,300	11.5	311,900	9.0
Jackson	55,100	15.7	56,000	12.5
Kalamazoo	99,700	9.5	103,600	7.6
Lansing-East Lansing	197,100	9.7	202,200	10.1
Muskegon	55,500	16.8	59,500	11.9
Saginaw-Bay City-Midland	152,300	14.8	160,200	13.3
Upper Peninsula	118,100	17.4	122,550	14.8
County				
Alcona	2,900	21.0	3,000	18.6
Alger	3,200	15.9	3,275	14.0
Allegan	32,875	14.3	34,550	10.5
Alpena	12,475	18.4	13,025	13.0
Antrim	5,900	18.8	6,200	13.2
Arenac	6,075	14.9	6,375	13.2
Baraga	2,475	22.2	2,525	19.1
Barry	12,950	16.9	13,000	13.5
Bay	43,300	17.0	45,550	14.4
Benzie	3,700	24.3	3,950	18.1
Berrien	59,500	15.5	62,325	12.4
Branch	17,200	13.1	18,150	10.7
Calhoun	53,525	14.4	55,975	11.1
Cass	20,050	11.2	21,475	10.3
Charlevoix	8,000	16.9	8,350	14.4
Cheboygan	8,175	24.1	8,300	21.8
Chippewa	10,150	22.2	10,350	20.4
Clare	8,500	16.3	9,225	14.3
Clinton	26,250	9.1	26,925	10.5
Crawford	3,825	17.8	4,000	14.4
Delta	14,725	18.4	14,625	16.4
Dickinson	11,525	11.8	13,275	9.9
Eaton	41,850	8.3	42,925	9.6
Emmett	12,400	14.5	12,625	13.6
Genesse	161,575	16.4	169,600	12.2
Gladwin	7,175	16.8	7,725	12.9
Gogebic	7,450	16.5	7,300	15.8
Grand Traverse	27,775	13.4	30,525	10.9
Gratiot	13,675	13.8	14,575	13.3
Hillsdale	18,075	12.1	19,450	9.4
Houghton	13,350	13.8	13,525	11.6
Huron	12,025	17.4	12,825	13.0
Ingham	129,025	10.2	132,375	10.1
Ionia	19,400	15.2	22,075	14.4
Iosco	8,575	15.4	8,850	12.0

Table C-7 (continued) Michigan MSA and County Employment and Unemployment Rates, 1983 and 1984

Area	1983		1984	
	Number Employed	Unemployment Rate	Number Employed	Unemployment Rate
Iron	6,050	12.6	6,125	13.1
Isabella	27,525	9.3	28,625	8.7
Jackson	55,050	15.7	56,025	12.5
Kalamazoo	99,675	9.5	103,550	7.6
Kalkaska	5,500	16.2	6,050	11.2
Kent	218,175	11.9	230,350	9.4
Keweenaw	700	19.8	725	26.1
Lake	2,750	14.8	2,925	12.6
Lapeer	27,800	13.5	29,350	11.5
Leelanau	7,075	15.2	7,775	12.4
Lenawee	32,350	16.1	33,250	12.3
Livingston	40,075	15.1	42,300	8.8
Luce	2,300	18.1	2,350	15.1
Mackinac	6,400	23.8	6,350	24.3
Macomb	274,375	15.7	289,625	11.9
Manistee	8,150	17.0	8,300	14.6
Marquette	24,575	16.3	26,275	11.3
Mason	10,275	17.5	10,550	13.9
Mecosta	13,475	12.4	13,900	11.3
Menominee	9,750	16.8	10,550	13.2
Midland	27,100	14.4	28,500	16.5
Missaukee	3,675	18.2	4,025	15.6
Monroe	52,525	15.2	55,450	12.9
Montcalm	18,475	16.9	18,825	17.4
Montmorency	2,050	26.1	1,975	22.5
Muskegon	55,550	16.9	59,475	11.9
Newaygo	12,650	17.1	13,275	15.1
Oakland	398,700	13.5	420,850	9.5
Oceana	8,200	17.6	8,750	15.2
Ogemaw	7,225	17.1	7,450	14.2
Ontonagon	2,250	31.8	2,175	22.0
Osceola	7,400	16.2	7,775	11.8
Oscoda	2,075	21.7	2,250	15.9
Otsego	7,850	12.3	8,375	10.5
Ottawa	77,175	10.2	81,500	7.8
Presque Isle	3,675	23.5	3,875	20.2
Roscommon	5,350	18.3	5,575	15.7
Saginaw	81,900	13.8	86,125	11.5
St. Clair	54,900	15.2	57,950	12.9
St. Joseph	22,475	11.3	24,425	10.5
Sanilac	13,425	18.6	14,225	16.0
Schoolcraft	3,200	20.8	3,150	22.7
Shiawassee	20,850	18.1	22,250	16.5
Tuscola	19,950	16.2	21,375	13.4
Van Buren	23,250	17.1	23,675	14.4
Washtenaw	132,750	9.5	141,200	7.0
Wayne	893,650	14.6	943,325	11.1
Wexford	9,100	15.7	9,950	13.8

[1] Data are for the Metropolitan Statistical Areas (MSAs) as defined by the Executive Office of the President, Office of Management and Budget, in June 1983. These MSAs represent a revised statistical definition of Michigan's metropolitan areas which result in a different geographic grouping of counties than under the former SMSA definition.

Source: Michigan Employment Security Commission.

Table C-8

U.S. and Michigan Manufacturing Industries,
Average Weekly and Hourly Earnings, 1974–1984

Year	Michigan			United States		
	Average Weekly Earnings	Average Hourly Earnings	Real Average Weekly Earnings (1967 Dollars)	Average Weekly Earnings	Average Hourly Earnings	Real Average Weekly Earnings (1967 Dollars)
1974	232.35	5.63	155.84	176.80	4.42	119.70
1975	250.76	6.15	156.43	190.79	4.83	118.36
1976	290.97	6.81	172.27	209.32	5.22	122.77
1977	326.79	7.55	181.15	228.90	5.68	126.12
1978	346.20	8.07	178.36	249.27	6.17	127.57
1979	360.25	8.74	164.65	269.34	6.70	123.89
1980	381.87	9.52	150.64	288.62	7.27	116.94
1981	426.27	10.53	153.83	318.00	7.99	116.74
1982	449.33	11.18	155.86	330.26	8.49	114.24
1983	494.02	11.62	166.62	354.08	8.83	118.66
1984	526.18	12.18	171.45	373.22	9.17	119.97
1983: January	468.59	11.40	160.15	341.43	8.71	116.49
February	472.71	11.41	161.72	339.50	8.75	115.79
March	476.28	11.41	162.89	346.10	8.74	117.96
April	488.02	11.52	165.49	349.05	8.77	118.12
May	483.84	11.50	164.07	350.32	8.78	117.91
June	493.49	11.63	166.38	354.24	8.79	118.83
July	489.86	11.64	164.16	353.60	8.84	118.14
August	482.99	11.47	161.64	352.96	8.78	117.54
September	511.00	11.75	170.79	361.71	8.89	119.85
October	508.70	11.76	170.59	362.23	8.90	119.71
November	520.19	11.88	173.45	365.98	8.97	120.75
December	524.35	11.98	174.73	372.45	9.04	122.72
1984: January	527.24	12.01	174.99	368.65	9.08	120.79
February	518.63	11.95	171.11	368.74	9.06	120.27
March	522.20	12.06	171.72	369.96	9.09	120.39
April	528.23	12.06	172.85	372.60	9.11	120.66
May	519.70	12.03	170.00	369.87	9.11	119.43
June	528.61	12.18	172.58	372.91	9.14	120.02
July	514.42	12.19	167.18	369.95	9.18	118.69
August	513.94	12.15	166.86	369.26	9.14	117.97
September	526.68	12.22	169.02	375.66	9.23	119.45
October	529.99	12.24	169.92	373.41	9.22	118.43
November	517.91	12.42	167.77	378.51	9.30[1]	120.05
December	562.48	12.64	181.97	387.81	9.39[1]	122.92

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[1] Preliminary.

Source: Michigan Employment Security Commission.

Table C-3

Michigan Manufacturing and Durable Goods Employment, 1975-1984
(Thousands)

Year		Total Manufacturing	Total Durable Goods	Lumber and Wood Products	Furniture and Fixtures	Primary Metal Products	Fabricated Metal Products	Non-electrical Machinery	Electrical Machinery	Motor Vehicles and Equipment	Other Transportation Equipment	Other Durable Goods
1975		983.7	778.2	12.8	18.6	79.5	120.4	136.6	38.2	321.2	11.7	39.2
1976		1,061.7	845.4	14.1	19.6	86.2	137.3	138.0	39.5	357.6	12.9	40.2
1977		1,128.4	905.9	14.4	20.0	91.6	145.7	150.6	40.9	386.5	13.6	42.6
1978		1,179.6	952.8	14.4	21.5	91.6	155.6	159.8	42.7	409.6	14.2	43.4
1979		1,160.2	935.1	14.1	23.0	88.0	150.8	167.2	41.9	392.7	13.0	44.4
1980		998.9	795.0	11.6	23.0	67.3	118.0	158.4	34.9	326.3	13.9	41.6
1981		979.0	778.1	10.5	23.0	65.0	117.5	154.8	33.0	319.4	15.5	39.4
1982		876.9	684.5	9.7	21.6	51.1	101.7	132.1	30.4	286.5	16.2	35.2
1983		880.5	685.8	10.8	22.2	49.5	102.9	116.9	30.6	299.7	17.9	35.3
1984		945.8	743.7	11.8	25.4	52.7	117.2	128.4	33.4	319.7	18.5	36.6
1983:	January	833.7	646.8	9.7	21.5	47.1	95.3	115.9	29.7	277.9	16.6	33.1
	February	843.9	657.1	9.7	20.5	48.0	98.4	116.6	29.8	284.3	16.9	32.9
	March	849.3	661.4	9.6	20.2	48.7	98.7	116.3	30.1	286.9	17.4	33.5
	April	862.7	670.9	10.2	20.4	49.5	99.2	114.7	30.7	294.3	17.6	34.3
	May	869.8	680.1	10.7	21.1	49.7	101.0	115.3	30.6	298.6	17.8	35.2
	June	875.0	686.6	11.3	21.8	49.9	102.5	116.5	31.3	299.3	18.0	36.0
	July	872.5	683.6	11.0	22.3	48.9	101.4	115.4	31.1	299.2	18.1	36.2
	August	871.6	675.4	11.7	23.1	48.8	102.0	114.8	29.0	292.2	18.0	35.8
	September	914.1	706.4	11.8	23.6	50.1	107.0	117.8	31.9	310.1	18.4	35.7
	October	920.1	714.2	11.4	23.7	50.5	108.1	117.9	33.0	314.5	18.5	36.6
	November	924.6	720.6	11.8	24.1	51.4	109.4	119.6	30.3	318.5	18.6	36.9
	December	932.3	726.6	11.3	24.6	51.9	111.3	121.6	30.3	319.7	18.7	37.2
1984:	January	924.3	724.4	11.5	24.0	52.7	113.9	122.1	33.0	313.2	18.5	35.5
	February	933.1	733.4	11.6	24.3	53.6	115.3	123.9	33.8	316.5	18.7	35.7
	March	943.0	742.7	11.7	24.4	53.9	116.8	125.7	34.4	320.7	18.9	36.2
	April	933.4	732.2	11.6	24.3	53.5	116.8	125.9	34.4	309.9	19.1	36.7
	May	938.7	737.0	11.8	24.9	53.7	117.5	127.0	34.1	311.9	19.1	37.0
	June	947.1	744.7	12.2	25.5	53.6	117.8	129.8	33.6	315.5	19.3	37.4
	July	941.4	738.2	11.9	25.4	52.1	115.7	129.1	33.3	314.8	19.3	36.6
	August	933.6	728.2	11.9	26.2	52.4	115.5	129.4	30.0	308.8	16.8	37.2
	September	965.5	760.7	11.9	26.2	49.1	119.3	132.7	34.4	331.7	18.3	37.1
	October	966.0	762.7	11.9	26.3	52.5	120.8	131.9	33.7	329.8	18.1	37.7
	November	958.2	756.3	11.8	26.6	52.6	118.3	131.0	33.8	327.4	18.0	36.8
	December	965.6	764.4	11.6	26.4	52.2	118.4	132.5	32.6	336.3	18.2	36.2

Source: Michigan Employment Security Commission.

Table C-4

Michigan Manufacturing and Nondurable Goods Employment, 1975-1984
(Thousands)

Year	Total Manufacturing	Total Nondurable Goods Manufacturing	Food & Kindred Products	Textile Mill Products & Apparel	Paper & Allied Products	Printing, Publishing & Allied	Chemicals Petroleum & Related	Other Nondurable Goods
1975	983.7	205.5	51.5	22.2	23.5	34.5	45.9	27.9
1976	1,061.7	216.3	51.3	25.9	24.6	33.7	48.0	32.8
1977	1,128.4	222.5	51.9	27.3	24.3	32.3	49.7	37.0
1978	1,179.6	226.8	52.4	27.7	23.7	33.6	48.3	41.1
1979	1,160.2	225.0	52.1	25.8	23.8	34.1	47.8	41.4
1980	998.9	203.9	48.8	19.2	21.6	33.2	47.5	33.6
1981	979.0	200.9	46.9	19.3	21.7	33.2	46.6	33.2
1982	876.9	192.4	46.1	17.3	20.4	32.7	44.9	31.0
1983	880.5	194.7	45.4	18.8	20.4	34.0	42.8	33.3
1984	945.8	202.2	45.7	20.3	20.8	35.7	42.3	37.4
1983: January	833.8	186.9	43.7	17.0	20.0	32.8	43.2	30.2
February	844.0	186.9	42.5	17.4	20.0	32.8	43.1	31.1
March	849.5	188.2	42.8	17.6	20.0	33.1	42.9	31.8
April	859.6	188.7	43.0	18.2	20.1	33.6	42.2	31.6
May	871.3	191.2	43.8	18.6	20.1	33.9	42.5	32.3
June	882.5	195.9	46.0	19.3	20.5	34.3	42.7	33.1
July	879.4	195.9	47.6	18.4	20.5	33.9	42.8	32.7
August	874.6	199.2	49.2	18.9	20.7	34.1	43.0	33.3
September	906.5	200.1	47.3	19.8	20.8	34.6	42.8	34.8
October	915.1	200.9	47.0	20.0	20.5	35.0	42.4	36.0
November	921.6	201.0	46.4	20.3	20.6	34.8	42.5	36.4
December	927.7	201.1	45.8	20.5	20.7	35.0	42.5	36.6
1984: January	924.3	199.9	44.7	20.5	20.8	35.1	42.0	36.8
February	933.1	199.7	43.8	20.2	20.9	35.3	42.1	37.4
March	943.0	200.3	43.2	20.5	21.0	35.6	42.2	37.8
April	933.4	201.2	44.5	20.2	20.6	35.9	42.0	38.0
May	938.7	201.7	45.2	20.5	20.8	36.0	41.5	37.7
June	947.1	202.4	46.2	20.4	21.1	35.8	42.0	36.9
July	941.4	203.2	47.6	20.2	20.9	35.8	42.3	36.4
August	933.6	205.5	48.8	19.5	20.9	36.1	42.9	37.3
September	965.5	204.8	47.5	20.5	20.6	36.1	42.2	37.9
October	966.0	204.0	47.0	20.1	20.7	35.7	42.7	37.8
November	958.2	202.0	45.9	20.3	20.5	35.6	42.4	37.3
December	965.6	201.2	44.1	21.0	20.6	35.8	42.8	36.9

Source: Michigan Employment Security Commission.

Table C-5

Michigan Nonmanufacturing Employment, 1975-1984
(Thousands)

Year		Total Nonmanufacturing Industries	Construction	Transportation, Communications, & Utilities	Wholesale Trade	Retail Trade &	Finance Real Estate, Insurance	Services	Mining
1975		1,569.8	106.3	144.8	146.8	509.6	134.0	514.4	13.8
1976		1,626.8	110.0	145.6	148.9	531.0	136.9	541.1	13.2
1977		1,717.3	122.8	150.8	151.8	557.1	142.2	580.4	12.1
1978		1,818.4	138.8	155.9	164.2	584.9	147.4	613.8	13.3
1979		1,855.9	139.5	160.6	170.4	590.9	154.5	626.7	13.2
1980		1,816.1	116.8	152.2	161.5	572.1	156.5	644.4	12.5
1981		1,786.9	106.8	147.9	157.9	556.8	155.0	649.6	12.9
1982		1,738.6	89.5	143.3	150.7	542.6	151.9	650.3	10.4
1983		1,772.8	86.5	139.4	154.6	556.9	151.4	675.0	9.0
1984		1,831.0	89.2	138.5	170.0	573.6	153.8	696.5	9.4
1983:	January	1,689.9	74.9	137.0	146.7	530.6	149.5	642.6	8.6
	February	1,685.6	71.9	136.7	147.3	522.0	149.8	649.7	8.1
	March	1,697.5	73.1	137.2	148.9	526.7	149.8	653.7	8.2
	April	1,633.4	75.5	138.6	150.7	544.0	150.2	666.1	8.4
	May	1,767.6	83.7	140.8	252.6	557.2	151.3	672.9	9.1
	June	1,796.6	90.0	142.4	155.1	566.8	153.0	679.9	9.4
	July	1,798.9	93.9	142.6	156.4	562.1	153.2	681.6	9.2
	August	1,798.2	96.2	126.8	157.5	566.7	153.3	688.1	9.6
	September	1,823.1	97.7	143.1	158.5	569.8	152.4	692.1	9.5
	October	1,824.2	98.0	142.4	159.5	571.1	151.6	692.1	9.4
	November	1,826.6	94.9	142.4	160.5	577.8	151.2	690.2	9.5
	December	1,831.8	87.7	143.2	161.7	588.0	152.0	690.3	8.9
1984:	January	1,771.9	74.4	139.0	162.8	555.7	150.9	680.3	8.8
	February	1,772.1	73.1	138.8	164.4	548.8	150.7	687.5	8.7
	March	1,786.4	74.7	138.5	166.1	554.8	150.9	692.5	8.9
	April	1,803.1	84.1	138.5	165.8	562.8	151.7	690.7	9.5
	May	1,832.0	91.8	140.2	167.6	573.3	153.4	695.9	9.8
	June	1,851.1	97.1	137.7	171.1	580.2	156.0	698.9	10.0
	July	1,852.3	99.9	136.7	172.1	577.6	156.2	699.9	9.8
	August	1,852.2	97.4	138.6	172.7	577.0	156.5	700.2	9.8
	September	1,857.2	97.6	136.6	174.2	578.6	154.9	703.7	9.7
	October	1,860.5	97.5	139.1	174.8	581.0	154.2	704.4	9.4
	November	1,862.1	95.3	137.9	173.9	590.3	154.6	700.9	9.3
	December	1,870.6	87.9	137.8	174.8	603.4	155.2	702.7	8.9

Source: Michigan Employment Security Commission.

Table C-9

Michigan Manufacturing Industries, Average Weekly Earnings, 1972-1984

Industry	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984
Manufacturing Industries	$211.52	$228.63	$232.35	$250.76	$290.97	$326.79	$346.20	$360.25	$381.87	$426.27	$449.33	$494.02	$526.18
Durable Goods	217.80	235.79	239.37	258.53	302.56	340.95	359.69	373.48	396.02	441.17	466.43	517.53	552.41
Lumber & Wood Products	118.80	128.14	136.32	147.72	164.74	179.53	199.06	214.08	224.36	250.77	259.95	304.93	298.15
Furniture	159.34	164.55	175.90	181.16	198.60	221.91	238.90	252.01	268.15	299.50	313.44	372.67	408.59
Primary Metals	217.94	243.12	255.72	268.20	320.16	358.63	390.99	395.74	418.30	467.46	483.32	505.36	502.65
Fabricated Metals	204.50	221.19	222.33	240.64	286.11	322.72	334.09	338.16	360.45	399.63	419.33	481.47	518.30
Nonelectrical Machinery	216.19	238.46	247.48	253.01	279.70	318.85	348.29	381.60	403.45	443.58	457.29	479.21	526.53
Electrical Machinery	193.76	196.51	207.48	221.51	251.70	284.70	309.48	294.07	320.83	342.30	385.16	420.47	431.18
Transportation Equipment	237.67	255.55	256.13	284.17	335.36	378.24	394.14	408.24	436.14	486.92	522.75	588.29	633.40
Nondurable Goods	183.18	190.76	198.53	218.67	241.79	266.14	285.94	302.29	321.88	360.81	384.33	407.71	427.01
Food & Kindred Products	175.96	187.17	203.11	224.80	244.35	261.92	280.57	306.12	331.75	369.84	392.14	408.36	432.01
Textile Mill Prod.& Appar.	191.53	200.83	208.71	227.62	258.54	302.87	324.85	332.87	340.20	404.91	456.15	500.60	532.90
Paper	191.22	201.87	225.48	225.55	253.85	282.22	312.99	327.58	350.75	399.09	434.30	472.58	491.95
Printing & Publishing	185.05	189.39	197.64	212.99	231.01	247.86	267.20	285.37	298.57	327.72	335.31	335.59	352.74
Chemicals	201.18	210.16	216.92	245.41	275.12	309.52	335.45	346.36	362.11	398.21	422.20	457.38	488.80

Source: Michigan Employment Security Commission.

Table C-10

Michigan Manufacturing Industries, Average Weekly Hours, 1972-1984

Industry	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984
Manufacturing Industries	42.8	43.4	41.3	40.8	42.7	43.3	42.9	41.2	40.1	40.5	40.2	42.5	43.2
Durable Goods	43.0	43.9	41.4	40.9	43.1	43.7	43.3	41.3	40.1	40.4	40.1	42.8	43.6
Lumber & Wood Products	38.9	39.2	38.4	38.6	39.3	39.2	39.1	38.6	37.9	40.4	37.9	41.8	39.7
Furniture	41.3	40.6	40.4	39.0	40.0	40.8	41.0	39.5	39.4	39.5	38.2	40.8	43.1
Primary Metals	42.5	43.9	42.1	40.3	42.6	43.8	43.8	41.4	39.3	39.7	39.5	41.4	41.1
Fabricated Metals	42.2	43.1	40.5	39.9	42.3	42.7	41.9	40.0	39.3	39.1	39.0	42.3	43.3
Nonelectrical Machinery	42.7	44.2	43.1	41.0	41.7	43.1	43.4	43.3	42.0	41.6	40.2	41.2	43.3
Electrical Machinery	43.0	42.6	41.7	40.6	42.0	43.0	42.9	40.3	40.7	39.8	39.8	41.9	41.7
Transportation Equipment	43.9	44.7	41.0	41.6	44.6	44.8	44.3	41.5	39.9	40.8	40.9	44.2	44.7
Nondurable Goods	41.7	41.2	40.3	40.3	41.1	41.7	41.5	40.5	40.2	40.7	40.5	41.5	41.7
Food & Kindred Products	41.4	41.0	41.3	41.7	41.8	41.8	41.2	41.3	41.6	41.5	41.4	41.4	41.5
Textile Mill Prod. & Appar.	42.0	41.7	39.8	39.6	40.8	42.1	41.5	38.9	38.2	38.9	40.5	42.4	42.7
Paper	45.3	44.9	44.1	43.5	44.4	45.2	45.2	43.4	42.9	44.2	43.6	44.5	44.2
Printing & Publishing	37.3	37.2	36.9	36.1	36.8	37.9	37.9	37.1	36.2	37.1	37.2	37.6	38.3
Chemicals	42.0	42.1	41.5	41.1	42.0	42.5	43.1	42.1	41.8	42.4	40.7	41.1	41.6

Source: Michigan Employment Security Commission.

Table C-11

Michigan Personal Income by Major Sources, 1975-1984
(Millions)

Source	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984
Wage & Salary Disbursements	$35,462	$40,686	$46,176	$52,118	$56,958	$57,287	$60,426	$59,672	$ 63,191	$ 69,645
Farm	116	126	138	158	183	232	206	244	317	352
Mining	200	205	211	250	285	287	329	257	231	261
Contract Construction	1,499	1,625	1,956	2,398	2,664	2,352	2,342	2,048	1,947	2,000
Manufacturing	14,157	17,430	20,384	22,860	24,326	22,788	24,238	22,579	24,145	28,002
Durable	11,644	14,516	17,097	19,265	20,446	18,902	20,093	18,362	19,639	23,030
Nondurable	2,513	2,914	3,287	3,595	3,880	3,885	4,144	4,216	4,506	4,971
Wholesale Trade	2,064	2,130	2,360	2,752	3,137	3,204	3,398	3,381	3,574	4,117
Retail Trade	3,466	3,825	4,207	4,695	5,059	5,178	5,340	5,347	5,644	5,990
Finan., Insur., & Real Est.	1,351	1,473	1,634	1,872	2,117	2,340	2,473	2,595	2,757	2,908
Trans., Comm., & Utilities	1,988	2,249	2,509	2,876	3,192	3,265	3,447	3,500	3,654	3,862
Services	4,599	5,190	5,867	6,702	7,567	8,381	9,139	9,740	10,597	11,362
Government	5,965	6,365	6,837	7,461	8,325	9,149	9,402	9,863	10,197	10,654
Other Industries	57	68	76	93	105	109	114	118	127	133
Other Labor Income	3,785	4,471	5,369	6,127	6,750	7,085	6,999	6,929	7,752	8,986
Proprietors' Income	2,795	2,895	3,430	3,587	3,707	3,342	2,994	2,593	2,956	3,171
Farm	510	357	457	460	515	445	506	414	330	256
Nonfarm	2,285	2,538	2,973	3,127	3,192	2,898	2,489	2,179	2,626	3,916
Total Income/Place of Work	42,042	48,052	54,975	61,832	67,415	67,714	70,419	69,194	73,899	81,802
Less: Contrib./Soc. Ins.	2,121	2,383	2,572	2,934	3,328	3,359	3,830	3,820	4,120	4,643
Plus: Resid. Adjustment	229	285	326	375	426	427	428	451	507	549
Net Income/Place of Resid.	40,150	45,954	52,729	59,273	64,512	64,781	67,017	65,825	70,286	77,709
Plus: Dividends, Int., Rent	6,554	7,240	8,129	9,387	10,818	12,401	15,030	16,173	16,923	19,323
Plus: Transfer Payments	7,836	8,130	8,432	8,872	10,118	13,498	14,204	15,796	16,863	16,923
Total Pers. Income/Resid.	$54,540	$61,324	$69,291	$77,532	$85,448	$90,681	$96,251	$97,974	$104,071	$113,956
Total Real Personal Income (1967 Dollars)	$34,024	$36,306	$38,410	$39,944	$39,053	$35,772	$34,735	$33,983	$ 35,100	$ 37,131

Source: U.S. Department of Commerce, Bureau of Economic Analysis.

Table C-12

Michigan Personal Income by Major Sources, Quarterly, 1978-1983
(Millions, Seasonally Adjusted Annual Rate)

Source	1978				1979				1980			
	I	II	III	IV	I	II	III	IV	I	II	III	IV
Wage and Salary Disbursement	$49,746	$51,116	$52,780	$54,828	$57,148	$57,124	$56,907	$56,651	$57,616	$ 55,955	$ 56,372	$ 59,204
Farm	150	156	160	165	171	174	184	201	220	233	239	236
Mining	221	247	261	272	271	278	290	299	302	296	263	289
Construction	2,278	2,355	2,457	2,504	2,577	2,676	2,722	2,678	2,570	2,330	2,203	2,306
Manufacturing	21,630	22,336	23,128	24,347	25,338	24,787	23,957	23,223	23,491	21,811	21,845	24,004
Durable	18,186	18,802	19,505	20,568	21,464	20,906	20,078	19,339	19,611	18,005	18,008	19,986
Nondurable	3,443	3,534	3,623	3,779	3,874	3,881	3,880	3,885	3,880	3,806	3,837	4,019
Wholesale Trade	2,611	2,692	2,796	2,908	3,036	3,122	3,180	3,209	3,229	3,177	3,164	3,249
Retail Trade	4,522	4,649	4,738	4,873	5,028	5,033	5,072	5,103	5,189	5,065	5,157	5,301
Finance, Ins.,& Real Estate	1,784	1,845	1,899	1,963	2,072	2,092	2,146	2,157	2,291	2,322	2,348	2,399
Trans., Comm.,& Utilities	2,782	2,867	2,892	2,962	3,156	3,163	3,195	3,255	3,211	3,216	3,248	3,386
Services	6,415	6,570	6,831	6,994	7,235	7,426	7,714	7,874	8,214	8,289	8,393	8,627
Government	7,270	7,305	7,524	7,745	8,144	8,271	8,339	8,545	8,793	9,109	9,401	9,296
Federal Civilian	974	984	983	1,019	1,033	1,031	1,029	1,063	1,076	1,134	1,138	1,197
Federal Military	180	178	182	186	183	182	185	194	193	196	200	222
State & Local	6,116	6,142	6,359	6,540	6,928	7,058	7,125	7,288	7,523	7,778	8,064	7,877
Other Industries	84	95	94	96	101	103	107	107	108	111	114	112
Other Labor Income	5,868	5,995	6,196	6,449	6,740	6,763	6,727	6,772	7,111	6,872	6,956	7,400
Proprietors' Income	3,496	3,598	3,652	3,602	3,643	3,756	3,753	3,675	3,554	3,246	3,287	3,290
Farm	468	463	484	426	499	586	506	467	440	368	464	507
Nonfarm	3,029	3,135	3,168	3,176	3,144	3,170	3,247	3,206	3,114	2,872	2,823	2,783
Total Income by Place of Work	59,111	60,709	62,629	64,879	67,531	67,644	67,387	67,097	68,209	66,122	66,675	69,850
Less: Contrib. for Soc. Ins.	2,835	2,888	2,963	3,049	3,374	3,348	3,311	3,278	3,402	3,258	3,311	3,466
Plus: Residence Adjustment	352	372	383	395	417	424	436	446	441	446	445	460
Net Income by Place of Resid.	56,628	58,192	60,049	62,225	64,573	64,719	64,513	64,265	65,251	63,309	63,807	66,844
Plus: Dividends, Int., Rent	8,818	9,143	9,569	10,019	10,397	10,593	10,944	11,336	12,019	12,273	12,377	12,937
Plus: Transfer Payments	8,654	8,759	8,966	9,107	9,281	9,481	10,450	11,259	12,176	13,144	14,450	13,223
Total Pers. Income by Resid.	$74,049	$76,094	$78,584	$81,352	$84,252	$85,793	$85,907	$86,860	$89,446	$ 88,726	$ 90,633	$ 94,004

Table C-12 (continued)

Michigan Personal Income by Major Sources, Quarterly, 1978-1983
(Millions, Seasonally Adjusted Annual Rate)

Source	1981				1982				1983			
	I	II	III	IV	I	II	III	IV	I	II	III	IV
Wage & Salary Disbursements	$59,727	$60,942	$60,667	$60,368	$59,381	$60,068	$60,259	$58,980	$60,807	$ 62,013	$64,046	$65,526
Farm	216	204	199	204	216	232	253	275	292	310	327	340
Mining	305	324	353	334	318	263	225	221	239	214	238	234
Contract Construction	2,324	2,396	2,354	2,294	2,237	2,045	1,966	1,945	1,967	1,885	1,965	1,973
Manufacturing	24,092	24,754	24,599	23,507	22,715	23,147	23,101	21,351	22,758	23,172	24,765	25,773
Durable	20,037	20,586	20,409	19,341	18,561	18,901	18,829	17,158	18,387	18,720	20,265	21,115
Nondurable	4,055	4,167	4,190	4,166	4,155	4,246	4,272	4,193	4,372	4,452	4,500	4,658
Wholesale Trade	3,325	3,393	3,458	3,416	3,361	3,381	3,428	3,353	3,399	3,588	3,581	3,663
Retail Trade	5,293	5,370	5,404	5,291	5,228	5,334	5,406	5,421	5,432	5,574	5,738	5,809
Finance, Ins., & Real Estate	2,415	2,442	2,487	2,549	2,472	2,583	2,658	2,669	2,668	2,769	2,769	2,820
Trans., Comm.,& Utilities	3,362	3,465	3,483	3,477	3,507	3,519	3,509	3,467	3,623	3,579	3,660	3,753
Services	8,928	9,087	9,172	9,370	9,511	9,562	9,896	9,992	10,295	10,473	10,726	10,815
Government	9,349	9,397	9,050	9,811	9,704	9,882	9,698	10,168	10,008	10,329	10,149	10,213
Federal Civilian	1,213	1,199	1,218	1,245	1,236	1,258	1,293	1,317	1,305	1,349	1,363	1,370
Federal Military	225	226	229	259	257	260	264	275	284	293	293	298
State & Local	7,911	7,972	7,603	8,308	8,212	8,363	8,141	8,575	8,419	8,687	8,494	8,546
Other Industries	119	110	110	116	112	119	119	119	125	121	128	132
Other Labor Income	7,170	7,110	6,932	6,784	6,768	6,956	7,093	6,900	7,284	7,489	7,981	8,253
Proprietors' Income	3,116	3,007	3,043	2,811	2,773	2,501	2,374	2,724	2,871	2,882	2,981	3,091
Farm	445	468	602	508	584	346	215	513	438	267	262	352
Nonfarm	2,671	2,539	2,442	2,303	2,189	2,156	2,159	2,210	2,433	2,614	2,719	2,739
Total Income by Place of Work	70,013	71,059	70,646	69,963	68,922	69,525	69,726	68,603	70,962	72,384	75,008	76,870
Less: Contrib. for Soc. Ins.	3,793	3,865	3,845	3,818	3,823	3,841	3,850	3,769	3,975	4,052	4,184	4,271
Plus: Residence Adjustment	461	467	480	482	479	486	485	487	486	500	517	530
Net Income by Place of Resid.	66,681	67,661	67,277	66,627	65,579	66,170	66,361	65,321	67,473	68,833	71,341	73,129
Plus: Dividends, Int., Rent	14,016	14,642	15,622	15,841	16,107	16,292	16,116	16,178	16,473	16,610	17,154	17,352
Plus: Transfer Payments	14,034	13,858	14,313	14,611	14,943	15,506	16,026	17,429	17,053	17,244	16,530	16,625
Total Pers. Income by Resid.	$94,731	$96,161	$97,212	$97,078	$96,628	$97,969	$98,503	$98,928	$100,902	$102,687	$105,025	$107,306

Source: U.S. Department of Commerce, Bureau of Economic Analysis.

Table C-13

U.S. and Major Industrial States
Personal Income and Real Per Capita Personal Income, 1980-1983

State	Personal Income (Millions) 1980	1981	1982	1983	Real Personal Income (Millions of 1967 Dollars) 1980	1981	1982	1983	Real Per Capita Personal Income (1967 Dollars) 1980	1981	1982	1983
U.S.	$2,156,710	$2,420,039	$2,575,831	$2,734,122	$873,870	$888,414	$890,983	$916,261	$3,847	$3,871	$3,844	$3,915
Michigan	90,703	96,295	98,007	103,980	35,780	34,751	33,995	35,069	3,866	3,773	3,729	3,867
California	261,964	293,191	311,607	333,744	106,144	107,633	107,785	111,843	4,466	4,444	4,364	4,441
Florida	91,295	105,776	114,383	123,815	36,991	38,831	39,565	41,493	3,746	3,813	3,780	3,863
Illinois	119,511	132,997	137,898	142,488	48,424	48,824	47,699	47,751	4,236	4,258	4,160	4,163
Indiana	48,928	53,846	54,928	57,401	19,825	19,767	19,000	19,236	3,612	3,601	3,466	3,515
Massachusetts	58,018	64,974	70,647	76,489	23,508	23,852	24,437	25,633	4,094	4,144	4,250	4,445
New Jersey	80,897	90,387	97,770	105,455	32,778	33,182	33,819	35,340	4,443	4,480	4,553	4,735
New York	178,900	199,200	214,390	229,493	72,488	73,128	74,158	76,908	4,124	4,165	4,221	4,354
North Carolina	45,811	51,586	55,059	59,523	18,562	18,938	19,045	19,947	3,152	3,179	3,164	3,283
Ohio	101,510	110,373	114,828	120,525	41,130	40,511	39,719	40,390	3,808	3,752	3,687	3,762
Pennsylvania	111,113	122,614	129,815	136,176	45,021	45,012	44,903	45,635	3,790	3,790	3,780	3,838
Texas	135,169	159,257	174,445	183,730	54,769	58,464	60,341	61,572	3,825	3,967	3,936	3,903
Wisconsin	44,278	48,591	51,124	53,925	17,941	17,830	17,684	18,075	3,794	3,767	3,716	3,790

Source: Compiled by the Michigan Department of Management and Budget based on data from the U.S. Department of Commerce, Bureau of Economic Analysis, and the U.S. Department of Labor, Bureau of Labor Statistics.

Table C-14
U.S. Consumer Price Index—All Urban Consumers, 1984
(1967=100)

Group	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual Average	Percent Change 1983-84
All Items	305.2	306.6	307.3	308.8	309.7	310.7	311.7	313.0	314.5	315.3	315.3	315.5	311.1	4.3
Food and Beverages	291.6	294.2	294.3	294.5	293.6	294.3	295.3	296.9	296.4	296.6	296.6	297.2	295.1	3.8
Food	299.4	302.1	302.2	302.3	301.4	302.0	303.2	304.8	304.2	304.4	304.1	305.1	302.9	3.8
Food at home	290.2	293.6	293.1	292.8	290.7	291.4	292.5	294.4	293.4	293.4	292.4	293.2	292.6	3.7
Cereals & bakery products	299.8	300.3	301.5	302.8	303.5	304.9	306.6	307.8	307.9	308.7	309.0	310.7	305.3	4.4
Meats-poultry-fish-eggs	268.9	273.0	269.6	270.5	266.7	263.9	264.6	265.7	264.5	263.5	262.4	265.9	266.6	2.1
Dairy products	250.8	250.9	250.8	251.5	251.0	251.7	252.2	252.7	254.9	256.1	257.2	258.4	253.9	1.6
Fruits & vegetables	311.0	321.0	323.2	315.3	310.2	318.1	320.0	327.7	319.7	318.4	314.8	309.7	317.4	8.6
Food away from home	327.2	328.5	329.8	330.9	332.6	331.1	334.4	335.5	335.8	336.6	337.7	339.2	333.4	4.2
Alcoholic Beverages	219.0	219.9	220.7	221.3	221.5	222.4	222.5	222.9	223.1	224.2	223.8	223.9	222.1	2.6
Housing	329.2	331.0	331.5	333.2	334.6	336.2	338.1	339.5	341.4	341.2	340.9	341.2	336.5	4.1
Shelter	353.2	354.0	355.5	357.8	358.9	360.2	362.7	364.6	366.5	367.8	368.9	370.1	361.7	4.9
Rent, residential	242.9	243.6	244.8	246.4	247.2	248.4	249.7	251.1	252.4	253.8	254.8	256.1	249.3	5.2
Other rental costs	361.7	362.5	364.5	371.2	371.3	371.5	375.7	380.7	384.3	382.6	379.1	375.1	373.4	6.5
Homeowners' costs[1]	104.9	105.1	105.6	106.2	106.5	106.8	107.6	108.1	108.7	109.1	109.4	109.8	107.3	4.7
Fuel & Other Utilities	376.0	383.0	380.1	380.9	385.5	390.0	393.9	395.5	397.0	392.4	387.5	386.0	387.3	4.6
Fuels	470.4	479.6	475.2	476.0	483.5	490.7	496.5	498.6	500.1	492.1	482.6	480.2	485.5	3.5
Oil, coal & bottle gas	642.8	688.6	660.0	650.7	649.2	646.0	637.4	625.5	622.1	626.8	626.9	625.9	641.8	2.2
Gas (piped) & electricity	427.3	429.0	429.5	432.3	441.4	450.6	459.1	463.9	466.4	456.0	444.7	442.2	445.2	3.8
Household Furnishings & Opera.	240.4	240.4	241.2	242.3	242.4	242.3	241.9	242.2	244.1	244.3	244.2	244.2	222.3	4.0
Apparel and Upkeep	196.4	196.2	198.8	199.2	198.9	197.4	196.6	200.1	204.2	205.7	205.2	203.2	200.2	1.9
Apparel Commodities	183.6	183.2	185.9	186.3	185.8	184.0	183.0	186.6	191.2	192.6	191.9	189.6	187.0	1.4
Men's and boys'	189.7	187.9	189.9	190.6	190.7	190.3	189.8	192.6	195.6	197.6	197.8	196.0	192.4	4.6
Women's and girls'	158.8	159.0	163.3	163.2	161.8	157.9	156.2	163.1	170.5	172.2	170.4	167.2	163.6	1.1
Footwear	206.7	206.4	207.7	208.9	210.2	209.6	208.0	207.7	211.1	212.9	212.9	211.4	209.5	1.3
Transportation	306.0	305.8	306.9	309.6	312.2	313.1	312.9	312.9	313.7	315.5	316.1	315.8	311.7	4.5
Private	300.9	300.8	301.9	304.8	307.4	308.1	307.5	307.5	308.4	310.2	310.8	310.4	306.6	4.3
Public	378.2	377.4	377.4	377.1	379.8	385.2	389.3	390.8	389.5	391.1	391.8	392.8	385.0	6.2
Medical Care	369.5	373.2	374.5	375.7	376.8	378.0	380.3	381.9	383.1	385.5	387.5	388.5	379.5	6.2
Entertainment	249.9	251.5	251.7	253.8	253.5	254.5	255.3	256.4	257.3	258.3	259.0	260.1	256.1	4.1
Other Goods & Services	300.5	301.5	302.1	302.8	303.2	304.4	306.5	307.2	314.6	315.8	316.5	316.7	307.7	6.7
Commodities	276.8	278.3	278.7	280.1	280.4	280.6	280.6	281.4	282.3	283.1	283.0	282.8	280.7	3.4
Commodities less Food	263.0	263.8	264.4	266.5	267.4	267.4	266.8	267.1	268.8	269.8	269.9	269.2	267.0	3.1

[1] December 1982=100.

Source: U.S. Department of Labor, Bureau of Labor Statistics.

Table C-15
Detroit Consumer Price Index—All Urban Consumers, 1984
(1967=100)

Group	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual Average	Percent Change 1983-84
All Items	301.3	303.1	304.1	305.6	305.7	306.3	307.7	308.0	311.6	311.9	308.7	309.1	306.9	3.5
Food and Beverages	272.5	274.9	274.9	277.8	276.3	275.6	277.6	277.2	276.3	274.8	274.1	277.0	275.8	2.1
Food	276.2	278.9	278.9	282.0	280.5	279.7	281.7	281.3	280.3	278.5	277.9	281.2	279.8	2.2
Food at Home	277.2	281.8	281.8	285.4	283.1	281.6	284.4	283.4	282.1	279.2	278.7	282.5	281.7	2.2
Cereals & bakery products	300.8	302.9	305.0	314.0	315.7	314.8	315.7	317.8	315.1	313.5	314.5	316.8	312.2	4.3
Meat-poultry-fish-eggs	263.8	273.0	264.9	272.1	266.9	259.5	266.8	265.5	262.7	258.7	258.5	260.7	264.4	1.4
Dairy products	243.8	245.4	246.4	247.4	246.7	243.6	247.5	244.3	246.8	245.9	246.2	251.4	246.3	- 2.8
Fruits & vegetables	273.4	282.0	282.9	279.3	275.9	285.9	285.0	281.3	274.4	268.3	264.9	268.5	276.8	7.9
Food away from home	285.1	283.6	285.1	285.7	285.8	286.7	286.7	287.7	287.7	288.2	287.5	289.7	286.5	2.2
Alcoholic Beverages	248.7	247.1	247.2	247.8	246.8	247.9	250.2	248.9	249.5	251.4	249.5	247.7	248.6	1.1
Housing	331.0	332.0	333.9	334.4	334.8	336.7	338.7	339.1	344.3	344.3	335.5	337.8	336.9	2.8
Shelter	355.2	355.3	359.0	357.8	357.7	356.4	358.5	358.8	365.8	366.2	365.0	363.8	360.0	3.1
Rent, residential	224.4	224.8	226.6	225.8	226.9	226.7	227.6	228.1	231.9	233.4	232.7	232.7	228.5	3.8
Other rental costs	330.2	325.9	325.9	330.1	329.8	329.8	335.5	335.5	353.4	347.2	330.0	331.6	333.7	6.9
Homeowner's costs[1]	102.1	102.4	103.4	103.0	103.0	102.2	102.9	102.9	104.9	105.0	104.9	104.4	103.4	1.8
Fuel & Other Utilities	405.7	412.2	414.3	413.1	416.9	432.9	433.4	437.2	440.8	441.8	404.0	414.3	422.2	4.9
Fuels	478.4	488.5	491.7	489.9	494.0	519.6	517.2	523.3	528.5	530.5	472.1	490.2	501.9	2.9
Oil, coal & bottle gas	660.7	691.2	676.5	668.1	668.4	669.8	667.1	657.5	654.0	652.4	655.3	654.3	664.6	+ 2.2
Gas (piped) & electricity	455.3	463.1	468.2	467.1	471.5	499.5	497.1	504.8	510.9	513.2	448.9	468.9	480.7	3.8
Household Furnishings & Opera.	216.7	215.4	214.4	218.4	217.5	215.2	217.5	216.0	219.1	217.7	216.9	219.2	217.0	- 0.2
Apparel & Upkeep	159.6	168.2	167.7	163.1	163.9	164.9	165.5	164.7	174.4	170.7	168.8	163.5	166.3	- 0.2
Apparel Commodities	143.3	152.3	152.5	148.0	148.3	149.3	150.0	149.1	159.4	155.1	153.1	147.4	150.7	- 0.8
Men's and boys'	162.4	163.2	163.9	165.8	164.5	162.9	166.2	165.2	169.6	171.6	166.1	166.7	165.7	3.0
Women's and girls'	132.0	143.3	143.2	136.8	135.4	130.8	132.6	133.3	150.4	140.7	142.3	131.3	137.7	- 2.3
Footwear	140.3	148.1	148.6	139.0	145.1	153.8	150.5	152.4	156.6	162.6	159.5	159.4	151.3	3.0
Transportation	301.3	302.4	304.1	307.3	309.0	308.6	308.4	308.3	311.7	316.0	316.3	314.0	309.0	5.2
Private	298.3	299.2	301.0	304.3	305.8	305.5	305.1	305.2	308.6	312.9	313.0	310.7	305.8	4.9
Public	374.1	379.1	378.8	378.8	387.0	383.6	387.9	383.5	386.2	392.3	394.9	394.5	385.0	10.6
Medical Care	393.2	396.0	397.3	400.1	400.1	400.3	404.9	406.6	408.3	408.7	410.7	411.0	403.1	10.3
Enterainment	222.2	221.8	221.5	223.6	219.2	221.1	222.8	225.6	226.0	224.2	222.8	222.4	222.8	0.6
Other Goods & Services	296.1	294.4	293.9	294.3	294.2	294.2	296.3	297.0	303.5	302.7	301.8	301.9	297.5	4.1
Commodities	259.8	261.9	262.3	264.4	263.9	263.4	264.3	263.7	266.2	265.5	264.7	264.6	263.7	2.5
Commodities less Food & Bev.	249.1	250.8	251.5	253.1	253.2	252.7	253.0	252.4	256.5	256.3	255.4	253.9	253.2	2.7

[1] December 1982=100.

Source: U.S. Department of Labor, Bureau of Labor Statistics.

Table C-17

U.S. and Detroit Consumer Price Indices
and Inflation Rates, 1954-1984

Year	U.S.		Detroit	
	Index	Percent Change	Index	Percent Change
1954	80.5	0.5	82.3	0.4
1955	80.2	- 0.4	82.2	- 0.1
1956	81.4	1.5	83.8	1.9
1957	84.3	3.6	86.2	2.9
1958	86.6	2.7	87.5	1.5
1959	87.3	0.8	87.4	- 0.1
1960	88.7	1.6	88.2	0.9
1961	89.6	1.0	88.7	0.7
1962	90.6	1.1	88.9	0.2
1963	91.7	1.2	89.8	1.0
1964	92.9	1.3	90.5	0.8
1965	94.5	1.7	92.6	2.3
1966	97.2	2.9	96.7	4.4
1967	100.0	2.9	100.0	3.4
1968	104.2	4.2	104.3	4.3
1969	109.8	5.4	110.6	6.0
1970	116.3	5.9	117.4	6.1
1971	121.3	4.3	121.7	3.7
1972	125.3	3.3	126.2	3.7
1973	133.1	6.2	134.5	6.6
1974	147.7	11.0	149.1	10.9
1975	161.2	9.1	160.3	7.5
1976	170.5	5.8	168.9	5.4
1977	181.5	6.5	180.4	6.8
1978	195.4	7.7	194.1	7.6
1979	217.4	11.3	218.8	12.7
1980	246.8	13.5	253.5	15.9
1981	272.4	10.4	277.1	9.3
1982	289.1	6.1	288.3	4.0
1983	298.4	3.2	296.5	2.8
1984	311.1	4.3	306.9	3.5

Source: U.S. Department of Labor, Bureau of Labor Statistics.

Table C-16

U.S. and Detroit Consumer Price Indices, 1971-1984
(Annual Average)

Group	1971		1972		1973		1974		1975		1976		1977	
	U.S.	Detroit	U.S.	Detroit	U.S.	Detroit	U.S.	Detroit	U.S.	Detroit	U.S.	Detroit	U.S.	Detroit
All Items	121.3	121.7	125.3	126.4	133.1	134.5	147.7	149.1	161.2	160.3	170.5	168.9	181.5	180.4
Food	118.4	117.3	123.5	122.9	141.4	143.6	161.7	164.1	175.4	171.6	180.8	176.5	192.2	186.0
Food at home	116.4	116.1	121.6	121.6	141.4	144.8	162.4	165.3	175.8	171.1	179.5	173.3	190.2	183.5
Cereals & bakery products	113.9	114.5	114.7	115.8	127.7	134.5	166.1	182.1	184.8	189.8	180.6	184.5	183.5	193.7
Meat-poultry-fish-eggs	116.9	119.1	128.0	131.2	160.4	166.5	163.9	167.4	178.0	172.2	179.4	172.4	178.4	171.9
Dairy products	115.3	113.4	117.1	114.7	127.9	127.5	151.9	154.9	156.6	158.8	169.3	167.3	173.9	173.9
Fruits & vegetables	119.1	114.9	125.0	118.4	142.5	135.6	165.8	158.9	171.0	157.4	175.4	158.9	191.6	171.0
Other foods at home[1]	115.9	114.4	116.7	116.1	130.3	132.5	162.8	164.2	185.6	177.9	189.9	184.5	224.1	215.3
Food away from home	126.1	123.3	131.1	128.6	141.4	138.8	159.4	159.2	174.3	174.1	186.1	186.4	200.3	199.2
Housing	124.3	128.3	129.2	133.3	135.0	137.4	150.6	151.0	166.7	163.8	177.2	173.2	189.6	184.6
Shelter	128.8	137.3	134.4	143.1	140.7	147.4	154.3	159.5	169.7	170.3	179.0	177.2	191.1	188.0
Rent	115.2	116.6	119.0	120.4	124.2	124.4	130.2	129.8	137.3	136.1	145.4	142.1	153.5	150.8
Homeownership	133.7	141.4	140.1	147.7	146.7	152.1	163.2	165.5	181.7	177.2	191.7	184.3	204.9	195.4
Fuel & utilities	115.1	110.7	120.2	115.4	126.9	121.2	150.2	142.3	167.8	161.6	182.7	182.8	202.2	205.7
Fuel oil & coal	117.5	113.7	118.5	113.9	136.0	129.3	214.6	208.7	235.3	226.7	250.8	248.6	283.4	285.7
Gas & electricity	114.7	111.3	120.5	116.9	126.4	123.1	145.8	144.4	169.6	171.1	188.9	197.7	213.4	223.0
Household furnishings & opera.	118.1	112.6	121.0	115.1	124.9	117.3	140.5	130.5	158.1	145.0	168.5	156.6	177.0	160.5
Apparel & Upkeep	119.8	115.5	122.3	118.3	127.1	122.3	136.2	132.4	142.3	137.9	147.6	142.0	154.2	146.7
Men's & boys'	120.3	117.3	121.9	117.3	126.4	121.8	136.4	135.7	142.2	144.5	147.2	151.5	154.0	154.3
Women's & girls'	120.1	111.2	123.0	115.4	127.3	117.4	134.9	123.2	138.1	126.5	141.9	128.1	146.4	130.9
Footwear	121.5	120.7	124.9	124.8	130.2	132.6	138.1	144.6	144.2	146.9	149.9	147.2	156.9	150.8
Transportation	118.6	114.6	120.0	116.5	123.8	123.6	137.7	138.7	150.6	149.1	165.5	160.2	177.3	174.7
Private	116.1	111.8	117.5	113.9	121.5	121.3	136.6	137.2	149.8	148.0	164.6	159.5	176.7	174.8
Public	137.7	148.4	143.4	148.5	144.8	150.8	148.0	156.1	158.6	160.8	174.2	168.6	182.4	172.6
Medical Care	128.4	134.1	132.5	141.4	137.7	148.4	150.5	162.8	168.6	187.4	184.7	209.1	202.4	234.8

Table C-16 (continued)

U.S. and Detroit Consumer Price Indices, 1971-1984
(Annual Averages)

Group	1978		1979		1980		1981		1982		1983		1984	
	U.S.	Detroit	U.S.	Detroit	U.S.	Detroit	U.S.	Detroit	U.S.	Detroit	U.S.	Detroit	U.S.	Detroit
All Items	195.4	194.1	217.4	218.8	246.8	253.5	272.4	277.1	289.1	288.3	298.4	296.5	311.1	306.9
Food	211.4	205.5	234.5	226.5	254.6	245.2	274.6	264.2	285.7	274.3	291.7	273.7	302.9	279.8
Food at home	210.2	203.5	232.9	225.8	251.5	246.1	269.9	265.2	279.2	277.5	282.2	275.6	292.6	281.7
Cereals & bakery products	199.9	208.9	220.1	229.2	246.4	254.8	271.1	276.6	283.4	291.5	292.5	299.4	305.3	312.2
Meats-poultry-fish-eggs	204.3	196.9	234.2	225.9	242.2	235.5	252.8	250.8	262.1	263.8	261.0	260.8	266.6	264.4
Dairy products	185.6	188.9	207.1	221.2	227.4	242.3	243.6	252.5	247.0	257.8	250.0	253.5	253.9	246.3
Fruits & vegetables	212.9	192.3	230.0	202.6	246.7	220.6	276.3	250.9	291.4	265.3	292.2	256.6	317.4	276.8
Other foods at home[1]	n.a.	244.2	n.a.	258.9	n.a.	295.8	n.a.	320.3	n.a.	334.3	n.a.	334.4	n.a.	341.5
Food away from home	218.4	218.7	242.9	237.4	267.0	253.0	291.0	272.7	306.5	278.1	319.9	280.4	333.4	286.5
Housing	202.8	196.7	227.6	229.4	263.3	278.9	293.5	304.6	314.7	314.2	323.1	327.7	336.5	336.9
Shelter	210.4	204.0	239.7	234.2	281.7	309.8	314.7	334.2	337.0	339.5	344.8	349.3	361.7	360.0
Rent	164.0	162.6	176.0	176.5	191.6	194.1	208.2	206.1	224.0	214.3	236.9	220.2	249.3	228.5
Homeowner's costs[2]	227.2	212.2	262.4	258.9	314.0	332.8	352.7	359.7	376.8	363.9	102.5	101.6	107.3	103.4
Fuel & utilities	216.0	224.4	239.3	249.6	278.6	286.8	319.2	333.6	350.8	366.9	370.3	402.6	387.3	422.2
Fuel oil & coal	298.3	305.3	403.1	423.0	556.0	579.0	675.9	711.7	667.9	701.7	628.0	650.3	641.8	664.6
Gas & electricity	232.6	247.0	257.8	277.3	301.8	319.7	345.9	366.8	393.8	408.9	428.7	463.2	445.2	480.7
Household, furnishings & opera.	177.7	161.6	190.3	174.7	205.4	188.5	221.3	205.5	233.2	213.3	213.7	217.5	222.3	217.0
Apparel & Upkeep	159.6	148.1	166.6	148.1	178.4	155.6	186.9	159.1	191.8	162.2	196.5	166.6	200.2	166.3
Men's & boys'	157.3	152.1	160.8	150.2	168.4	149.5	177.5	159.2	183.9	163.0	183.9	160.8	192.4	165.7
Women's & girls'	149.3	133.1	151.9	129.2	155.1	138.5	157.5	135.5	159.1	132.4	161.9	141.0	163.6	137.7
Footwear	163.8	147.5	176.7	156.6	190.3	161.7	200.4	157.0	205.5	157.3	206.9	156.0	209.5	151.3
Transportation	185.5	184.9	212.0	210.0	249.7	246.8	280.0	279.7	291.5	291.8	298.4	293.7	311.7	309.0
Private	185.0	184.5	212.3	210.1	249.2	246.5	277.5	278.8	287.5	290.9	293.9	291.4	306.6	305.8
Public	188.7	192.8	200.3	207.3	251.6	253.9	312.0	298.6	346.0	310.9	362.6	348.1	385.0	385.0
Medical Care	219.4	251.8	239.7	274.5	265.9	297.7	294.5	320.1	328.7	346.4	357.3	365.5	379.5	403.1

[1] Due to revisions made in the U.S. Consumer Price Index in 1978, the other foods at home category has been changed and is not comparable to previous years.

[2] Index changed to rent equivalent—December 1982=100. Homeownership was changed to home owner's costs in 1983.

Source: U.S. Department of Labor, Bureau of Labor Statistics.

Table C-18

New Incorporations in Michigan, 1955-1984

Year	Profit	Nonprofit	Foreign (Out-of-State)	Total
1955	4,619	1,094	379	6,092
1956	4,337	1,196	389	5,922
1957	3,842	1,391	461	5,694
1958	3,900	1,272	404	5,576
1959	4,812	1,209	527	6,548
1960	4,800	1,261	499	6,560
1961	4,788	1,312	497	6,597
1962	5,135	1,243	601	6,979
1963	5,102	1,241	528	6,871
1964	5,825	1,256	593	7,674
1965	6,152	1,286	627	8,065
1966	6,315	1,356	640	8,311
1967	6,341	1,361	715	8,417
1968	7,700	1,588	825	10,113
1969	9,586	1,767	1,064	12,417
1970	8,378	1,782	1,054	11,214
1971	8,270	1,993	1,082	11,214
1972	9,202	2,134	1,175	12,511
1973	9,709	1,878	1,093	12,680
1974	9,342	2,106	1,009	12,457
1975	9,996	2,138	926	13,060
1976	11,545	2,080	972	14,597
1977	13,273	2,082	956	16,311
1978	14,538	2,148	1,039	17,725
1979	18,654	2,217	1,062	21,933
1980	16,931	2,503	1,077	20,511
1981	17,139	2,288	1,277	20,704
1982	17,201	2,294	1,300	20,795
1983	18,463	2,613	1,540	22,616
1984	19,474	2,574	1,625	23,673

Source: Michigan Department of Commerce, Corporation Division.

Table C-19

Michigan Liquid Assets, 1970-1984
(Millions)

End of Year	Total	Demand Deposits	Time Deposits	Savings and Loan Shares	Credit Union Shares and Deposits
1970	$25,370.1	$ 7,092.3	$12,770.7	$ 4,193.4	$1,313.7
1971	28,743.7	7,841.7	14,413.3	5,001.7	1,487.0
1972	32,002.6	8,555.2	15,754.5	6,029.8	1,663.1
1973	34,991.7	9,127.5	17,210.3	6,747.8	1,906.1
1974	37,214.7	9,187.0	18,655.7	7,320.0	2,052.0
1975	39,987.8	9,116.7	19,950.6	8,625.5	2,295.0
1976	43,567.2	9,084.7	21,873.4	10,175.0	2,434.0
1977	48,881.0	10,143.9	24,137.0	11,761.8	2,838.3
1978	54,303.9	11,246.6	26,648.7	13,248.8	3,160.0
1979	58,025.3	10,951.3	29,098.7	14,444.3	3,531.0
1980	61,251.8	10,662.7	31,047.3	15,937.0	3,604.8
1981	63,498.7	9,673.9	34,190.8	15,934.0	3,700.0
1982	65,627.9	8,941.8	37,077.9	15,408.2	4,200.0
1983	77,165.3	10,000.0	40,481.0[1]	21,784.3	4,900.0
1984[2]	79,038.0	10,370.0	43,754.0[1,3]	19,314.0	5,600.0

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[1] These figures contain checkable deposits. For 1984, savings and loans had $509 million in NOW and Super NOW accounts and $2,367 million in money-market deposit accounts.

[2] Preliminary.

[3] Reflects headquarters move.

Source: Federal Deposit Insurance Corporation, the Michigan Credit Union League, and the Federal Home Loan Bank of Indianapolis.

Table C-20

U.S. Interest Rates, 1962-1984
(Percent Per Annum)

Period	U.S. Government Security Yields 3-Month Treasury Bills[1]	U.S. Government Security Yields 10-Year Issues	Prime Commercial Paper (4-6 Months)	High Grade Municipal Bonds (Standard & Poor's)	Corporate Bonds (Moody's Aaa)
1962	2.778	—	3.26	3.18	4.33
1963	3.157	—	3.55	3.23	4.26
1964	3.549	—	3.97	3.22	4.40
1965	3.954	—	4.38	3.27	4.49
1966	4.881	—	5.55	3.82	5.13
1967	4.321	—	5.10	3.98	5.51
1968	5.339	—	5.90	4.51	6.18
1969	6.677	—	7.83	5.81	7.03
1970	5.458	—	7.72	6.51	8.04
1971	4.348	—	5.11	5.70	7.39
1972	4.071	6.21	4.69	5.27	7.21
1973	7.041	6.84	8.15	5.18	7.44
1974	7.886	7.99	9.84	6.09	8.57
1975	5.838	7.6	6.32	6.89	8.83
1976	4.989	7.42	5.34	6.49	8.43
1977	5.265	8.41	5.61	5.56	8.02
1978	7.221	9.44	7.99	5.90	8.73
1979	10.041	10.65	10.91[2]	6.39	9.63
1980	11.506	11.46	12.29	8.51	11.94
1981	14.077	13.91	14.76	11.23	14.17
1982	10.686	13.00	11.89	11.57	13.79
1983	8.630	11.10	8.89	9.47	12.04
1984	9.580	12.44	10.16	10.15	12.71

[1] Rate on new issues within period.

[2] Beginning November 1, 1979, data are for 6-month paper.

Source: Economic Indicators, Council of Economic Advisors, selected issues.

Table C-21

New Private Housing Units Authorized in Michigan MSAs, 1979-1984

MSAs	1979	1980	1981	1982	1983	1984
Ann Arbor	1,277	914	271	215	333	471
Battle Creek	543	504	86	42	97	237
Benton Harbor	463	224	408	220	279	301
Detroit	19,829	9,637	5,453	4,720	8,373	11,706
Flint	2,037	825	504	301	677	901
Grand Rapids	2,577	2,162	1,551	1,546	3,597	3,667
Jackson	721	759	163	361	177	240
Kalamazoo	1,494	1,417	1,245	371	700	1,280
Lansing-East Lansing	3,787	2,092	1,559	655	1,054	1,533
Muskegon	535	640	261	202	209	520
Saginaw-Bay-Midland	1,952	1,163	469	495	559	625
Total Metropolitan	35,215	19,837	11,970	9,128	16,057	21,481
Total Nonmetropolitan	14,090	9,991	7,102	5,148	5,581	6,549
Michigan	49,305	29,828	19,072	14,276	21,638	28,030

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[1] Preliminary.

Source: "Housing Units Authorized by Building Permits and Public Contracts," Construction Reports, Series C40, U.S. Department of Commerce, Bureau of the Census, 1977-1983.

Table C-23

New Passenger Car Sales in Michigan, 1967-1984[1]

Year	Number	Percent of U.S. Total
1967	515,692	6.22
1968	596,485	6.34
1969	587,689	6.13
1970	479,224	6.13
1971	633,963	6.52
1972	646,146	6.57
1973	664,505	6.62
1974	513,129	5.89
1975	496,476	6.01
1976	606,979	6.22
1977	664,122	6.18
1978	669,700	6.12
1979	611,443	6.68
1980	449,487	5.13
1981	445,758	5.28
1982	374,643	4.83
1983	485,062	5.44
1984	552,954	5.46

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[1] Retail sales as measured by new car registrations.

Source: R. L. Polk and Company, Motor Statistical Division.

Table C-25

U.S. Motor Vehicle Production, 1976-1984

Year		Passenger Cars	Trucks and Buses	Total Motor Vehicles
1976		8,497,660	2,999,703	11,497,363
1977		9,191,377	3,473,626	12,665,003
1978		9,176,635	3,722,567	12,899,202
1979		8,434,150	3,046,586	11,480,736
1980		6,375,516	1,632,826	8,008,342
1981		6,240,245	1,635,659	7,875,904
1982		4,973,870	1,902,164	6,976,034
1983		6,798,071	2,421,095	9,219,166
1984		7,777,721	3,146,356	10,924,077
1983:	January	435,455	128,563	564,018
	February	494,288	172,095	666,383
	March	574,535	210,744	785,279
	April	533792	189,085	722,877
	May	611,350	208,784	820,134
	June	653,151	233,883	887,034
	July	461,046	157,293	618,339
	August	484,081	197,741	681,822
	September	629,056	230,349	859,405
	October	690,375	241,463	931,838
	November	650,092	243,558	893,650
	December	580,850	207,537	788,387
1984:	January	670,687	257,655	928,342
	February	695,171	261,265	956,436
	March	783,807	289,932	1,073,739
	April	672,200	261,172	933,372
	May	712,979	291,068	1,004,047
	June	684,381	284,363	968,744
	July	524,872	213,408	738,280
	August	557,060	265,740	822,800
	September	541,792	241,698	738,490
	October	701,686	293,965	995,651
	November	678,927	274,861	953,788
	December	554,159	211,229	765,388

Source: *Automotive News*, Crain Automotive Group, Inc., selected issues; *Motor Vehicle Facts and Figures*, Motor Vehicle Manufacturers Association of the U.S., Inc.

Table C-22

Motor Vehicle Registrations, 1963-1984
(Thousands)

	Michigan				U.S.	
Year	Automobiles	Trucks and Buses	Total	Percent Change in Total	Total Motor Vehicle Registrations[1]	Michigan as Percent of U.S.
1963	3,161	439	3,600	4.2	82,714	4.35
1964	3,294	465	3,759	4.4	86,301	4.36
1965	3,497	494	3,991	6.2	90,361	4.42
1966	3,516	508	4,024	0.8	93,962	4.28
1967	3,587	546	4,133	2.7	96,931	4.26
1968	3,734	583	4,317	4.5	100,885	4.28
1969	3,873	615	4,488	4.0	105,097	4.26
1970	3,918	651	4,569	1.8	198,375	4.22
1971	4,052	687	4,740	3.7	112,922	4.20
1972	4,265	745	5,010	5.7	118,506	4.23
1973	4,436	804	5,240	4.6	125,420	4.18
1974	4,536	865	5,401	3.1	129,938	4.16
1975	4,628	918	5,546	2.7	132,951	4.17
1976	4,726	975	5,701	2.8	138,549	4.11
1977	4,954	1,032	5,986	5.0	143,747	4.16
1978	5,124	1,121	6,245	4.3	148,778	4.20
1979	5,093	1,248	6,341	1.5	154,118	4.11
1980	5,246	1,242	6,488	2.3	155,890	4.16
1981	5,005	1,161	6,166	- 5.0	158,457	3.89
1982	5,006	1,245	6,251	1.4	159,449	3.92
1983	5,025	1,270	6,295	0.7	163,861	3.84
1984[2]	5,310	1,224	6,534	3.8	n.a.	n.a.

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[1] This definition of motor vehicles includes only nonmilitary automobiles, trucks and buses.

[2] Preliminary.

Source: U.S. Federal Highway Administration.

Table C-24

State Share of Passenger Car Assemblies, 1972-1984 Model Years
(Percent of Total)

State	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984
U.S. Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Michigan	32.4	33.3	31.0	33.2	33.9	32.4	30.2	29.1	26.2	30.4	36.0	33.3	28.2
California	7.4	8.4	7.6	6.7	6.7	8.1	7.8	8.8	5.0	4.4	6.6	2.4	2.9
Delaware	4.6	4.4	3.8	3.5	4.9	4.0	5.6	5.4	6.3	7.9	7.0	7.3	5.8
Georgia	6.3	5.8	5.4	5.5	6.6	6.5	5.7	5.0	5.8	7.2	6.8	5.6	6.3
Illinois	4.8	4.4	4.0	4.6	3.5	4.5	5.0	5.6	5.8	6.1	5.7	6.8	6.6
Kansas	2.3	2.2	1.5	2.3	2.8	2.9	2.6	2.7	2.1	1.5	2.3	4.0	3.4
Kentucky	0.9	0.9	0.8	1.3	1.1	1.1	1.3	1.1	0.5	1.3	0.5	0.3	0.4
Maryland	2.2	2.3	2.9	3.3	3.1	2.6	2.4	2.6	2.0	1.6	2.0	2.4	1.0
Massachusetts	1.4	1.7	1.2	0.9	1.0	1.5	1.7	1.8	2.4	2.1	1.6	0.9	1.9
Minnesota	0.9	0.8	0.9	1.3	1.0	1.3	0.9	—	—	—	—	—	—
Missouri	9.8	10.1	11.2	9.8	9.2	11.1	11.9	11.1	8.2	7.9	7.9	9.3	13.0
New Jersey	7.1	6.3	6.5	6.5	6.8	6.6	6.1	6.5	7.1	5.6	5.3	4.6	4.2
New York	2.2	2.0	1.9	1.6	1.4	2.5	2.6	2.6	4.2	4.4	3.5	1.7	1.3
Ohio	9.6	9.0	10.8	10.4	8.7	7.3	9.8	8.9	9.5	4.3	5.9	8.8	10.7
Oklahoma	—	—	—	—	—	—	—	0.4	4.2	4.9	1.7	2.6	4.1
Pennsylvania	—	—	—	—	—	—	—	1.4	3.3	2.7	2.0	1.3	1.3
Texas	2.2	2.4	2.6	3.0	2.9	2.5	2.1	2.3	2.5	2.9	3.2	3.5	2.8
Virginia	0.5	0.5	0.3	—	—	—	—	—	—	—	—	—	—
Wisconsin	5.4	5.5	7.6	6.1	6.4	5.0	4.3	4.5	4.9	4.8	2.0	5.2	6.1

Source: Ward's Automotive Reports, Ward's Communications, Inc., selected issues.

Table C-26

U.S. Automobile Sales, Truck Sales, Inventories, and Stock, 1958-1984
(Thousands)

Year	U.S. Automobile Sales (Retail)	Domestic Nameplate Sales	Foreign Import Sales	Foreign Import Sales as Percent of U.S. Auto Sales	End of Year Inventory	U.S. Stock of Autos (Still in Use)	Truck Retail Sales	U.S. Stock of Trucks
1958	4,575	4,204	371	8.1	544	52,492	731	10,057
1959	6,094	5,408	614	10.1	567	55,087	928	10,532
1960	6,637	6,139	498	7.5	841	57,103	925	10,803
1961	5,934	5,556	379	6.4	855	58,854	908	11,043
1962	7,093	6,752	341	4.8	841	60,920	1,068	11,463
1963	7,744	7,344	400	5.2	935	63,493	1,230	11,902
1964	8,098	7,614	484	6.0	923	66,051	1,352	12,445
1965	9,328	8,760	568	6.1	1,264	68,940	1,534	13,126
1966	9,024	8,373	651	7.2	1,309	71,264	1,614	14,357
1967	8,342	7,573	769	9.2	1,133	72,968	1,519	14,988
1968	9,638	8,607	1,031	10.7	1,467	75,385	1,805	15,685
1969	9,584	8,466	1,118	11.7	1,464	78,495	1,929	16,586
1970	8,383	7,116	1,267	15.1	1,220	80,448	1,746	17,688
1971	10,249	8,676	1,573	15.3	1,447	83,137	2,009	18,462
1972	10,944	9,322	1,622	14.8	1,310	86,439	2,531	19,773
1973	11,441	9,670	1,770	15.5	1,600	89,805	3,029	21,412
1974	8,867	7,451	1,395	16.0	1,655	92,608	2,587	23,312
1975	8,636	7,050	1,589	18.4	1,424	95,241	2,351	24,813
1976	10,100	8,607	1,493	14.8	1,465	97,818	3,044	26,560
1977	11,178	9,104	2,071	18.5	1,731	99,904	3,486	28,222
1978	11,308	9,308	2,000	17.7	1,729	102,957	3,914	30,565
1979	10,651	8,325	2,326	21.9	1,767	104,677	4,110	32,583
1980	8,973	6,578	2,395	26.7	1,448	104,564	3,476	35,268
1981	8,531	6,206	2,325	27.3	1,471	105,839	2,252	36,069
1982	7,978	5,757	2,221	27.8	1,126	106,867	2,559	36,987
1983	9,178	6,795	2,383	26.0	1,358	108,961	3,129	38,143
1984	10,393	7,952	2,442	23.5	1,417	n.a.	4,093	n.a.

Source: *Automotive News*, Crain Automotive Group, Inc., selected issues. *Motor Vehicle Facts and Figures*, Motor Vehicle Manufacturers Association of the U.S., Inc.

Table C-27

U.S. and Michigan Motor Vehicle Industry Employment, Earnings, and Hours, 1957-1984

	MICHIGAN				UNITED STATES				
Year	Number Employed (Thousands)	Average Weekly Earnings	Average Weekly Hours	Average Hourly Earnings	Number Employed (Thousands)	Average Weekly Earnings	Average Weekly Hours	Average Hourly Earnings	Michigan Motor Vehicle Employment as Percent of U.S. Motor Vehicle Employment
1957	387.7	$100.47	39.6	$ 2.54	769.3	$100.61	40.9	$ 2.46	50.4
1958	288.5	103.47	38.9	2.66	606.5	101.24	39.7	2.55	47.6
1959	303.4	115.95	41.0	2.83	692.3	111.38	41.1	2.71	43.8
1960	311.2	120.38	41.1	2.92	724.1	115.21	41.0	2.81	43.0
1961	268.4	118.29	39.6	2.99	632.3	114.69	40.1	2.86	42.4
1962	299.2	134.22	43.2	3.11	691.7	127.67	42.7	2.99	43.3
1963	315.8	141.00	43.6	3.23	741.3	132.68	42.8	3.10	42.6
1964	329.3	148.16	44.6	3.32	752.9	138.03	43.0	3.21	43.7
1965	364.5	160.20	46.3	3.46	842.7	147.63	44.2	3.34	43.3
1966	381.9	157.36	43.7	3.60	861.6	147.23	42.8	3.44	44.3
1967	361.8	154.92	41.5	3.73	815.8	144.84	40.8	3.55	44.3
1968	382.8	183.53	44.3	4.14	873.7	168.09	43.1	3.90	43.8
1969	398.7	179.00	41.9	4.27	911.4	170.56	41.6	4.10	43.7
1970	335.3	179.01	40.4	4.43	797.3	170.07	40.3	4.22	42.1
1971	353.6	209.79	41.6	5.04	842.1	194.46	41.2	4.72	42.0
1972	369.5	240.06	44.0	5.46	860.9	219.22	42.9	5.11	42.9
1973	401.0	258.44	44.9	5.76	955.3	238.06	43.6	5.46	42.0
1974	366.1	258.56	41.1	6.29	890.8	239.54	40.6	5.90	41.1
1975	321.2	286.98	41.7	6.88	774.1	262.68	40.6	6.46	41.5
1976	357.6	338.84	44.7	7.58	850.6	305.30	43.0	7.10	42.1
1977	386.5	381.64	44.9	8.50	947.3	345.40	44.0	7.85	40.8
1978	409.6	397.47	44.4	8.95	1,004.9	368.05	43.3	8.50	40.8
1979	392.7	411.88	41.6	9.90	990.4	372.37	41.1	9.06	39.7
1980	326.3	438.23	39.8	11.01	788.8	394.00	40.0	9.85	41.4
1981	319.4	490.51	40.7	12.05	788.7	450.72	40.9	11.02	40.5
1982	286.5	526.41	40.7	12.92	699.3	470.61	40.5	11.62	41.0
1983	299.7	596.44	44.3	13.45	757.8	524.80	43.3	12.12	39.5
1984	319.7	644.85	45.0	14.33	866.9	554.55	43.7	12.69	36.9

Source: U.S. Department of Labor and Michigan Employment Security Commission.

Table C-28

U.S. Automobile Price Indices, Personal Consumption Expenditures and Installment Credit, 1959-1984

Year	Wholesale Price Index Motor Vehicles and Equipment (1967=100)	Consumer Price Index New Cars (1967=100)	Consumer Price Index Used Cars (1967=100)	Personal Consumption Expenditures Auto and Parts (Billions)	Automobile Installment Credit (Millions)		
					Extended	Repaid	Total Consumer Credit-Auto Paper
1959	100.3	105.9	89.5	18.9	17,779	15,579	16,420
1960	98.8	104.5	83.6	19.7	17,657	16,419	17,658
1961	98.6	104.5	86.9	17.8	16,029	16,552	17,135
1962	98.6	104.1	94.8	21.5	19,694	17,447	19,381
1963	97.8	103.5	96.0	24.4	22,126	19,254	22,254
1964	98.3	103.2	100.1	26.1	24,046	21,369	24,934
1965	98.5	100.9	99.4	30.0	27,227	23,543	28,619
1966	98.6	99.1	97.0	30.4	27,341	25,404	30,556
1967	100.0	100.0	100.0	30.1	26,667	26,499	30,724
1968	102.8	102.8	102.6	36.3	31,424	28,018	34,130
1969	104.8	104.4	103.1	38.7	32,354	29,882	36,602
1970	108.5	107.6	104.3	36.2	29,791	30,137	35,184
1971	114.7	112.0	110.2	45.4	34,873	31,393	38,664
1972	118.0	111.0	110.5	52.4	40,194	34,729	44,129
1973	119.2	111.1	117.6	57.1	46,453	39,452	51,130
1974	128.2	117.5	122.6	50.4	45,429	44,929	52,871
1975	144.6	127.6	146.4	55.8	51,413	48,406	55,879
1976	153.7	135.7	167.9	72.6	63,743	53,278	67,798
1977	163.7	142.9	182.8	84.8	75,641	60,437	82,890
1978	176.0	153.8	186.5	95.7	87,981	69,245	101,863
1979	190.4	166.0	201.0	96.6	93,901	79,186	116,523
1980	208.7	179.3	208.1	90.7	83,454	82,977	116,808
1981	237.6	190.2	256.9	101.6	93,240	84,745	125,323
1982	251.3	197.6	296.4	109.9	95,997	91,099	130,235
1983	256.9	202.6	329.7	133.2	n.a.	n.a.	143,114
1984	261.4	208.5	375.7	149.8	n.a.	n.a.	172,589

Source: U.S. Department of Labor, Bureau of Labor Statistics; U.S. Department of Commerce, Bureau of Economic Analysis; and the Federal Reserve System, the Board of Governors.

Table C-30

Rate Changes Granted to Regulated Utilities in 1984

Telephone Companies			
	Ace Telephone	$ 369,294	
	Au Gres Telephone	190,230	
	Hickory Telephone	59,027	
	Total	$ 618,551	
Electric Companies			
	Consumers' Power	$137,000,000[1]	
	Detroit Edison	182,900,000[1]	
	Indiana and Michigan	15,000,000	
	Thumb Electric Cooperative	791,829	
	Michigan Power	550,001	
	Western Michigan Electric Cooperative	217,506	
	Total	$336,459,336	
Gas Companies			
	Michigan Gas Utilities	$ 3,600,000	
	Consumers' Power	114,800,000	
	Total	$118,400,000	
Grand Total			$455,477,887

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[1] Portion of the rate increase is an interim increase.

Source: Michigan Department of Commerce, Public Service Commission.

Table C-33

Number of Farms, Average Size, and Land in Farms in Michigan, 1956-1984

Year	Number of Farms	Average Size (acres)	Land in Farms (acres)
1956	135,000	120	16,600,000
1957	132,000	123	16,300,000
1958	127,000	126	16,000,000
1959	123,000	128	15,700,000
1960	118,000	131	15,400,000
1961	114,000	132	15,100,000
1962	110,000	135	14,800,000
1963	106,000	138	14,600,000
1964	102,000	141	14,400 000
1965	98,000	144	14,100,000
1966	95,000	146	13,900,000
1967	92,000	148	13,600,000
1968	89,000	149	13,300,000
1969	86,000	150	12,900,000
1970	84,000	151	12,700,000
1971	82,000	152	12,500,000
1972	81,000	152	12,300,000
1973	78,000	154	12,000,000
1974	76,000	154	11,700,000
1975	70,000	164	11,500,000
1976	70,000	163	11,400,000
1977	68,000	168	11,400,000
1978	66,000	173	11,400,000
1979	66,000	173	11,400,000
1980	65,000	173	11,400,000
1981	65,000	175	11,400,000
1982	64,000	178	11,400,000
1983	64,000	178	11,400,000
1984	63,000	181	11,400,000

Source: Michigan Department of Agriculture, based on the U.S. Census of Agriculture.

Table C-34

U.S. and Michigan Resident Population, July 1, 1951—July 1, 1984
(Thousands)

Year	Michigan Population	U.S. Population	Michigan as a Percent of U.S.
1951	6,497	153,982	4.22
1952	6,650	156,393	4.25
1953	6,822	158,956	4.29
1954	7,066	161,884	4.36
1955	7,285	165,069	4.41
1956	7,465	168,088	4.44
1957	7,569	171,187	4.42
1958	7,667	174,149	4.40
1959	7,767	177,135	4.38
1960	7,834	179,975	4.35
1961	7,893	182,973	4.32
1962	7,933	185,738	4.27
1963	8,058	188,438	4.28
1964	8,187	191,095	4.28
1965	8,357	193,460	4.32
1966	8,512	195,501	4.35
1967	8,630	197,374	4.37
1968	8,696	199,312	4.36
1969	8,781	201,306	4.36
1970	8,901	203,805	4.37
1971	8,974	206,827	4.34
1972	9,029	209,284	4.31
1973	9,078	211,357	4.29
1974	9,118	213,342	4.26
1975	9,118	215,465	4.23
1976	9,129	217,563	4.19
1977	9,171	219,760	4.16
1978	9,218	222,095	4.14
1979	9,266	224,567	4.12
1980[1]	9,262	226,546	4.09
1981	9,210	229,542	4.01
1982	9,115	231,822	3.93
1983	9,050	234,023	3.87
1984[2]	9,075	236,158	3.84

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[1] April 1, 1980.

[2] Provisional estimates.

Source: Current Population Reports, Series P-25, Bureau of the Census.

Table C-29

U.S. Motor Vehicle Production and Auto Sales, Quarterly, 1978-1984
(Thousands)

Year/ Quarter		U.S. Auto Production	U.S. Truck and Bus Production	Total Motor Vehicle Production	Domestic Auto Sales	Import Auto Sales	Total U.S. Auto Sales
1978:	I	2,268	865	3,133	2,056	485	2,541
	II	2,659	1,008	3,667	2,776	562	3,338
	III	1,851	853	2,704	2,177	540	2,717
	IV	2,398	996	3,394	2,299	413	2,712
1979:	I	2,411	1,031	3,442	2,173	553	2,726
	II	2,483	915	3,398	2,262	682	2,944
	III	1,656	535	2,191	1,993	578	2,571
	IV	1,884	565	2,449	1,892	512	2,404
1980:	I	1,784	500	2,283	1,848	663	2,511
	II	1,634	351	1,983	1,550	590	2,140
	III	1,260	309	1,568	1,515	613	2,128
	IV	1,698	476	2,174	1,665	529	2,194
1981:	I	1,590	441	2,031	1,733	641	2,373
	II	2,033	491	2,524	1,576	633	2,209
	III	1,346	340	1,686	1,617	576	2,193
	IV	1,302	401	1,703	1,280	475	1,755
1982:	I	1,035	463	1,498	1,401	542	1,943
	II	1,520	589	2,109	1,534	560	2,094
	III	1,215	453	1,668	1,328	581	1,909
	IV	1,204	397	1,601	1,494	538	2,032
1983:	I	1,504	511	2,015	1,456	590	2,046
	II	1,798	632	2,430	1,878	625	2,503
	III	1,574	585	2,159	1,646	590	2,236
	IV	1,921	693	2,614	1,814	579	2,393
1984:	I	2,163	806	2,969	1,995	589	2,584
	II	2,085	832	2,917	2,250	643	2,893
	III	1,625	722	2,347	1,855	594	2,449
	IV	1.939	775	2,714	1,851	613	2,464

Source: Motor Vehicle Manufacturers' Association of the U.S. Automotive News, Crain Automotive Group, Inc., selected issues.

Table C-31

Prices Received by Michigan Farmers, 1973-1984

Commodity	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984
Corn (per bushel)	$ 2.52	$ 2.91	$ 2.35	$ 2.38	$ 1.93	$ 2.05	$ 2.38	$ 2.66	$ 2.86	$ 2.27	$ 2.98	$ 3.08
Wheat (per bushel)	4.30	3.64	3.10	2.87	2.12	3.01	3.61	3.78	3.46	3.20	3.39	3.27
Oats (per bushel)	1.35	1.65	1.40	1.47	1.50	1.32	1.36	1.72	2.09	1.82	1.71	2.00
Soybeans (per bushel)	5.73	6.28	4.50	5.51	6.71	6.16	6.77	6.58	6.71	5.68	6.72	6.94
Dry Beans (per cwt.)	27.30	14.80	29.30	18.69	16.51	16.88	16.48	20.97	30.08	19.38	17.91	21.09
Potatoes (per cwt.)	6.13	4.15	6.03	5.23	5.76	4.64	4.82	6.42	9.23	6.01	6.36	7.39
Hay (baled, per ton)	31.00	39.00	43.50	46.68	52.67	54.42	40.83	36.08	44.38	62.33	52.00	59.08
Hogs (per cwt.)	$39.50	$35.80	$49.04	$44.10	$40.80	$47.87	$42.83	$39.38	$43.28	$54.15	$46.10	$49.00
Beef Cattle (per cwt.)	40.20	34.60	33.37	33.28	33.06	45.57	60.29	55.68	49.68	52.60	47.20	47.50
Veal Calves (per cwt.)	62.40	46.50	30.20	34.68	38.92	62.61	94.12	82.10	65.38	56.52	57.50	47.30
Lambs (per cwt.)	36.60	38.70	42.82	46.89	51.78	62.30	66.49	62.62	52.64	n.a.	n.a.	n.a.
Milk (whsl., per cwt.)	7.18	8.20	8.57	9.85	9.66	10.49	12.08	13.17	13.85	13.65	13.63	13.30
Turkeys (per lb.)	0.36	0.29	0.30	0.30	0.35	0.46	0.46	0.43	0.41	n.a.	n.a.	n.a.
Eggs (per doz.)	0.50	0.48	0.46	0.54	0.49	0.47	0.50	0.48	0.54	0.49	0.52	0.43
Wool (per lb.)	0.63	0.37	0.25	0.47	0.64	0.65	0.68	0.70	0.66	n.a.	n.a.	n.a.

Source: Agricultural Prices, U.S. Department of Agriculture, Crop Reporting Board. Agriculture Across Michigan, U.S. Department of Agriculture and Michigan Department of Agriculture.

Table C-32

Michigan Farm Income Components, 1968-1984
(Millions)

Year	Realized Farm Income					Farm Production Expenses	Net Changes in Farm Inventories	Net Farm[1] Income after Inventory Adjustments
	Cash Receipts from Farm Marketings	Government Payments	Nonmoney Income	Other Farm Income	Total			
1968	849.1	65.3	110.0	10.3	1,034.7	789.9	1.0	245.8
1969	888.2	73.4	117.1	10.5	1,089.1	799.5	6.0	295.6
1970	909.6	65.7	126.0	10.7	1,111.9	855.0	20.9	277.8
1971	972.5	52.5	128.0	12.5	1,165.5	889.2	- 27.9	248.4
1972	1,036.7	61.2	142.9	13.2	1,254.0	940.7	58.4	371.7
1973	1,514.7	38.9	169.9	16.7	1,740.1	1,119.0	- 91.7	529.4
1974	1,657.7	10.4	182.6	17.4	1,868.2	1,342.7	64.2	589.7
1975	1,657.4	13.3	190.3	20.4	1,881.3	1,425.4	58.2	514.1
1976	1,744.3	7.3	205.8	20.7	1,978.2	1,560.7	- 18.6	399.0
1977	1,949.2	21.2	276.8	23.0	2,269.8	1,726.1	- 38.3	505.5
1978	2,055.2	45.5	289.2	24.1	2,414.1	1,964.8	16.8	466.0
1979	2,321.4	15.6	319.2	30.4	2,686.5	2,264.0	97.3	519.8
1980	2,748.7	10.7	328.1	30.1	3,117.5	2,642.9	- 37.1	437.5
1981	2,756.5	17.3	381.3	37.1	3,192.2	2,857.1	166.1	501.2
1982	2,793.6	40.4	392.3	38.5	3,264.8	2,937.3	102.0	429.5
1983	3,001.5	140.9	386.0	30.2	3,558.7	2,969.1	-241.9	347.6
1984[2]	2,793.9	n.a.	n.a.	n.a.	n.a.	3,043.3	90.0	256.0

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[1] Net farm income reported by the U.S. Department of Agriculture does not always agree with that reported by the U.S. Department of Commerce, Bureau of Economic Analysis.

[2] Estimate.

Source: U.S. Department of Agriculture, Economic Research Service.

Table C-35

Michigan Population by County, 1980-1984

County	July 1, 1984 Preliminary[1]	April 1, 1980 Census	1980-84 Change		Components of Change			
					Births[2]	Deaths[2]	Net Migration[3]	
			Number	Percent			Number	Percent
Michigan	9,074,622	9,262,078	-187,456	- 2.02	587,401	322,625	-452,232	- 4.88
Alcona	9,850	9,740	110	1.13	457	527	180	1.85
Alger	8,826	9,225	- 399	- 4.33	593	442	- 550	- 5.96
Allegan	84,224	81,555	2,669	3.27	5,759	2,693	- 397	- 0.49
Alpena	31,408	32,315	- 907	- 2.81	2,015	1,198	- 1,724	- 5.34
Antrim	16,792	16,194	598	3.69	1,020	765	343	2.12
Arenac	15,160	14,706	454	3.09	953	712	213	1.45
Baraga	8,326	8,484	- 158	- 1.86	501	460	- 199	- 2.35
Barry	46,470	45,781	689	1.51	2,900	1,481	- 730	- 1.60
Bay	117,178	119,881	- 2,703	- 2.26	7,576	4,054	- 6,225	- 5.19
Benzie	11,141	11,205	- 64	- 0.57	734	523	- 275	- 2.45
Berrien	163,029	171,276	- 8,247	- 4.82	11,046	6,279	- 13,014	- 7.60
Branch	38,710	40,188	- 1,478	- 3.68	2,832	1,567	- 2,743	- 6.83
Calhoun	137,798	141,557	- 3,759	- 2.66	8,874	5,390	- 7,243	- 5.12
Cass	47,814	49,499	- 1,685	- 3.40	2,925	1,741	- 2,869	- 5.80
Charlevoix	19,709	19,907	- 198	- 1.00	1,420	825	- 793	- 3.98
Cheboygan	20,909	20,649	260	1.26	1,420	885	- 275	- 1.33
Chippewa	28,819	29,029	- 210	- 0.72	1,683	1,243	- 650	- 2.24
Clare	24,749	23,822	927	3.89	1,514	1,147	560	2.35
Clinton	55,284	55,893	- 609	- 1.09	3,719	1,301	- 3,027	- 5.42
Crawford	9,825	9,465	360	3.80	753	400	7	0.07
Delta	39,450	38,947	503	1.29	2,518	1,523	- 492	- 1.26
Dickinson	25,863	25,341	522	2.06	1,589	1,287	220	0.87
Eaton	89,292	88,337	955	1.08	5,254	2,318	- 1,981	- 2.24
Emmet	23,610	22,992	618	2.69	1,472	930	76	0.33
Genesee	434,148	450,449	- 16,301	- 3.62	30,172	14,135	- 32,338	- 7.18
Gladwin	21,287	19,957	1,330	6.66	1,279	857	908	4.55
Gogebic	19,319	19,686	- 367	- 1.86	929	1,177	- 119	- 0.60
Grand Traverse	57,039	54,899	2,140	3.90	3,886	1,882	136	0.25
Gratiot	39,682	40,448	- 766	- 1.89	2,629	1,695	- 1,700	- 4.20
Hillsdale	41,678	42,071	- 393	- 0.93	2,651	1,614	- 1,430	- 3.40

Table B-35 (continued)

Michigan Population by County, 1980-1984

County	July 1, 1984 Preliminary[1]	April 1, 1980 Census	1980-84 Change Number	1980-84 Change Percent	Components of Change Births[2]	Components of Change Deaths[2]	Net Migration[3] Number	Net Migration[3] Percent
Oakland	1,004,884	1,011,793	- 6,909	- .68	58,399	30,943	- 34,365	- 3.40
Oceana	21,994	22,002	- 8	- .04	1,624	831	- 801	- 3.64
Ogemaw	17,437	16,436	1,001	6.09	1,131	852	722	4.39
Ontonagon	9,685	9,861	- 176	- 1.79	496	477	- 195	- 1.98
Osceola	20,086	18,928	1,158	6.12	1,339	749	568	3.00
Oscoda	6,912	6,858	54	.79	478	408	- 16	- .23
Otsego	15,345	14,993	352	2.35	1,119	607	- 160	- 1.07
Ottawa	164,658	157,174	7,484	4.76	11,575	4,132	41	.03
Presque Isle	13,887	14,267	- 380	- 2.66	882	660	- 602	- 4.22
Roscommon	18,137	16,374	1,763	10.77	962	965	1,766	10.79
Saginaw	219,059	228,059	- 9,000	- 3.95	15,144	7,169	- 16,975	- 7.44
St. Clair	137,954	138,802	- 848	- .61	8,618	5,112	- 4,354	- 3.14
St. Joseph	57,715	56,083	1,632	2.91	3,897	2,117	- 148	- .26
Sanilac	40,127	40,789	- 662	- 1.62	2,698	1,686	- 1,674	- 4.10
Schoolcraft	8,453	8,575	- 122	- 1.42	520	420	- 222	- 2.59
Shiawassee	68,587	71,140	- 2,553	- 3.59	4,575	2,113	- 5,015	- 7.05
Tuscola	55,278	56,961	- 1,683	- 2.96	3,592	1,878	- 3,397	- 5.96
Van Buren	66,534	66,814	- 280	- .42	4,633	2,564	- 2,349	- 3.52
Washtenaw	261,377	264,748	- 3,371	- 1.27	16,338	6,046	- 13,663	- 5.16
Wayne	2,186,064	2,337,891	-151,827	- 6.49	143,437	96,057	-199,207	- 8.52
Wexford	26,154	25,102	1,052	4.19	1,778	1,085	359	1.43

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[1] The preliminary estimates are subject to change when more data become available.

[2] The number of births and deaths are derived from the reported vital statistics released by the Michigan Department of Public Health between 1980 and 1984. Three quarters of the 1980 numbers are used as those occuring between April 1, 1980 and December 31, 1980. One-half of the 1984 estimated resident births and deaths are used as those occurring between January 1, 1984 and June 30, 1984.

[3] Net migration is the difference between net change and natural increase.

Source: Michigan Department of Management and Budget, and U.S. Bureau of the Census.

Table B-35 (continued)

Michigan Population by County, 1980-1984

County	July 1, 1984 Preliminary[1]	April 1, 1980 Census	1980-84 Change		Components of Change			
			Number	Percent	Births[2]	Deaths[2]	Net Migration[3] Number	Net Migration[3] Percent
Houghton	38,109	37,872	237	0.63	2,175	1,814	- 124	- 0.33
Huron	36,002	36,459	- 457	- 1.25	2,386	1,637	- 1,206	- 3.31
Ingham	271,671	275,520	- 3,849	- 1.40	18,662	6,931	- 15,580	- 5.66
Ionia	52,380	51,815	565	1.09	3,884	1,695	- 1,624	- 3.13
Iosco	30,234	28,349	1,885	6.65	2,404	1,222	703	2.48
Iron	14,015	13,635	380	2.79	737	846	489	3.59
Isabella	54,569	54,110	459	0.85	3,063	1,300	- 1,304	- 2.41
Jackson	145,314	151,495	- 6,181	- 4.08	9,045	5,413	- 9,813	- 6.48
Kalamazoo	215,237	212,378	2,859	1.35	13,457	6,287	- 4,311	- 2.03
Kalkaska	11,500	10,952	548	5.00	922	422	48	0.44
Kent	461,718	444,506	17,212	3.87	35,502	14,806	- 3,484	- 0.78
Keweenaw	2,071	1,963	108	5.50	97	160	171	8.71
Lake	8,425	7,711	714	9.26	469	499	744	9.65
Lapeer	69,039	70,038	- 999	- 1.43	4,606	1,952	- 3,653	- 5.22
Leelanau	14,381	14,007	374	2.67	846	537	65	0.46
Lenawee	88,195	89,948	- 1,753	- 1.95	5,757	3,029	- 4,481	- 4.98
Livingston	100,634	100,289	345	0.34	5,911	2,466	- 3,100	- 3.09
Luce	5,969	6,659	- 690	-10.36	385	284	- 791	-11.88
Mackinac	10,238	10,178	60	0.59	615	504	- 51	- 0.50
Macomb	686,161	694,600	- 8,439	- 1.22	39,588	20,600	- 27,427	- 3.95
Manistee	22,338	23,019	- 681	- 2.96	1,205	1,107	- 779	- 3.38
Marquette	72,440	74,101	- 1,661	- 2.24	5,370	2,079	- 4,952	- 6.68
Mason	26,435	26,365	70	0.27	1,683	1,217	- 396	- 1.50
Mecosta	37,229	36,961	268	0.73	1,870	1,051	- 551	- 1.49
Menominee	25,975	26,201	- 226	- 0.86	1,696	1,215	- 707	- 2.70
Midland	75,623	73,578	2,045	2.78	4,890	1,873	- 972	- 1.32
Missaukee	10,563	10,009	554	5.54	838	382	98	0.98
Monroe	130,998	134,659	- 3,661	- 2.72	8,059	3,942	- 7,778	- 5.78
Montcalm	49,757	47,555	2,202	4.63	3,391	1,880	691	1.45
Montmorency	7,760	7,492	268	3.58	459	417	226	3.02
Muskegon	155,688	157,589	- 1,901	- 1.21	10,774	5,762	- 6,913	- 4.39
Newaygo	36,238	34,917	1,321	3.78	2,347	1,374	348	1.00

Table C-36

U.S. Population, Ranked by State, 1980

	1980		1984			1980		1984	
State	Population	Rank	Population	Rank	State	Population	Rank	Population	Rank
United States	226,504,825		236,158,000						
California	23,668,902	1	25,622,000	1	South Carolina	3,121,820	24	3,300,000	24
New York	17,558,072	2	17,735,000	2	Connecticut	3,107,576	25	3,154,000	25
Texas	14,229,191	3	15,989,000	3	Oklahoma	3,025,290	26	3,298,000	26
Pennsylvania	11,863,895	4	11,901,000	4	Iowa	2,913,808	27	2,910,000	29
Illinois	11,426,518	5	11,511,000	5	Colorado	2,889,964	28	3,178,000	27
Ohio	10,797,630	6	10,752,000	6	Arizona	2,718,215	29	3,053,000	28
Florida	9,746,324	7	10,976,000	7	Oregon	2,633,105	30	2,674,000	30
					Mississippi	2,520,638	31	2,598,000	31
					Kansas	2,363,679	32	2,438,000	32
MICHIGAN	9,262,078	8	9,075,000	8	Arkansas	2,286,435	33	2,349,000	33
					West Virginia	1,949,644	34	1,952,000	34
					Nebraska	1,569,825	35	1,606,000	36
New Jersey	7,364,823	9	7,515,000	9	Utah	1,461,037	36	1,652,000	35
North Carolina	5,881,766	10	6,165,000	10	New Mexico	1,302,894	37	1,424,000	37
Massachusetts	5,735,037	11	5,798,000	12	Maine	1,124,660	38	1,156,000	38
Indiana	5,490,224	12	5,498,000	14	Hawaii	964,691	39	1,039,000	39
Georgia	5,463,105	13	5,837,000	11	Rhode Island	947,154	40	962,000	41
Virginia	5,346,818	14	5,636,000	13	Idaho	943,935	41	1,001,000	40
Missouri	4,916,686	15	5,008,000	15	New Hampshire	920,610	42	977,000	42
Wisconsin	4,705,767	16	4,766,000	16	Nevada	800,493	43	911,000	43
Tennessee	4,591,120	17	4,717,000	17	Montana	786,690	44	824,000	44
Maryland	4,216,975	18	4,347,000	20	South Dakota	690,768	45	706,000	45
Louisiana	4,205,900	19	4,462,000	18	North Dakota	652,717	46	686,000	46
Washington	4,132,156	20	4,349,000	19	Delaware	594,338	47	613,000	47
Minnesota	4,075,970	21	4,162,000	21	Vermont	511,456	48	530,000	48
Alabama	3,893,888	22	3,990,000	22	Wyoming	469,557	49	511,000	49
Kentucky	3,660,777	23	3,723,000	23	Alaska	401,851	50	500,000	50

Source: U.S. Department of Commerce, Bureau of the Census.

Table C-37

Michigan School Enrollment, Grades K-12, 1975-1988[1]

Year		Kindergarten	Change From Last Period	Grades 1-6	Change From Last Period	Grades 7-9	Change From Last Period	Grades 10-12	Change From Last Period	Grades K-12	Change From Last Period
1975-76	Public	159,981	3,994	884,786	-29,322	506,107	- 6,387	475,334	1,474	2,026,208	-30,241
	Nonpublic	8,825	1,934	107,936	- 1,443	53,181	- 1,481	38,750	96	208,692	- 874
	Total	168,806	5,948	992,722	-30,765	559,288	-7,868	514,084	1,570	2,234,900	-31,115
1976-77	Public	152,790	- 7,191	866,756	-18,030	496,190	- 9,917	473,452	- 1,882	1,989,188	-37,020
	Nonpublic	9,937	1,112	109,287	1,351	52,943	- 238	38,686	- 64	210,853	2,161
	Total	162,727	- 6,079	976,043	-16,679	549,133	-10,155	512,138	- 1,946	2,200,041	-34,859
1977-78	Public	136,843	-15,947	852,650	-14,106	479,150	-17,040	460,862	-12,590	1,929,505	-59,683
	Nonpublic	9,882	- 55	108,107	- 1,180	51,896	- 1,047	38,795	109	208,680	- 2,173
	Total	146,725	-16,002	960,757	-15,286	531,046	-18,087	499,657	-12,481	2,138,185	-61,856
1978-79	Public	129,592	- 7,251	832,229	-20,421	457,555	-21,595	450,435	-10,427	1,869,811	-59,694
	Nonpublic	10,166	284	105,507	- 2,600	49,558	- 2,338	38,249	- 546	203,480	- 5,200
	Total	139,758	- 6,967	937,736	-23,021	507,113	-23,933	488,684	-10,973	2,073,291	-64,894
1979-80	Public	125,196	- 4,396	808,981	-23,248	435,955	-21,600	434,526	-15,909	1,804,658	-65,153
	Nonpublic	11,172	1,006	103,747	- 1,760	48,244	- 1,314	37,966	- 283	201,129	- 2,351
	Total	136,368	- 3,390	912,728	-25,008	484,199	-21,914	472,492	-16,192	2,005,787	-67,504
1980-81	Public	122,425	- 2,771	782,405	-26,576	418,929	-17,026	419,920	-14,606	1,743,679	-609,979
	Nonpublic	11,950	778	104,341	594	47,575	- 669	37,672	- 294	201,538	409
	Total	134,375	- 1,993	886,746	-25,982	466,605	-17,695	457,592	-14,900	1,945,217	-60,570
1981-82	Public	116,753	- 5,672	745,796	-36,609	405,852	-13,077	399,929	-19,991	1,668,330	-75,349
	Nonpublic	13,085	1,135	104,636	295	47,303	- 272	37,121	- 551	202,145	607
	Total	129,838	- 4,537	850,432	-36,314	453,155	-13,349	437,050	-20,542	1,870,475	-74,742
1982-83	Public	120,826	4,073	704,676	-41,120	402,308	- 3,544	382,154	-17,775	1,609,964	-58,366
	Nonpublic	13,807	722	101,206	- 3,430	47,577	274	35,760	- 1,361	198,350	- 3,795
	Total	134,633	4,795	805,882	-44,550	449,885	- 3,270	417,914	-19,136	1,808,314	-62,161

Table C-37 (continued)

Michigan School Enrollment, Grades K-12, 1975-1988[1]

Year		Kinder-garten	Change From Last Period	Grades 1-6	Change From Last Period	Grades 7-9	Change From Last Period	Grades 10-12	Change From Last Period	Grades K-12	Change From Last Period
1983-84	Public	121,423	597	676,998	-27,678	406,830	4,522	364,024	-18,130	1,569,275	-40,689
	Nonpublic	15,561	1,754	101,889	683	48,302	725	36,048	288	201,800	3,450
	Total	136,984	2,351	778,887	-26,995	455,132	5,247	400,072	-17,842	1,771,075	-37,239
1984-85[2]	Public	126,944	5,521	661,972	-15,026	391,020	-15,810	359,451	- 4,573	1,539,387	-29,888
	Nonpublic	15,745	184	104,236	2,347	47,009	- 1,293	35,675	- 373	202,665	865
	Total	142,689	5,705	766,208	-12,679	438,029	-17,103	395,126	- 4,946	1,742,052	-29,023
1985-86[2]	Public	127,920	976	659,893	- 2,079	367,170	-23,850	359,526	75	1,514,509	-24,878
	Nonpublic	15,867	122	116,191	11,955	44,874	- 2,135	36,261	586	204,193	1,528
	Total	143,787	1,098	776,084	9,876	412,044	-25,985	395,787	661	1,718,702	-23,350
1986-87[2]	Public	123,540	- 4,380	663,517	3,624	342,982	-24,188	358,990	- 536	1,489,029	-25,480
	Nonpublic	15,323	- 544	110,198	- 5,993	43,431	- 1,443	36,720	459	205,672	1,479
	Total	138,863	- 4,924	773,715	- 2,369	386,413	-25,631	395,710	- 77	1,694,701	-24,001
1987-88[2]	Public	121,230	- 2,310	665,502	1,985	327,222	-15,760	343,779	-15,211	1,457,733	-31,296
	Nonpublic	15,037	- 286	112,386	2,188	43,577	146	35,809	- 911	206,809	1,137
	Total	136,267	- 2,273	777,888	4,173	370,799	-15,614	379,588	-16,122	1,664,542	-30,159
1988-89[2]	Public	116,903	- 4,327	669,253	3,751	315,078	-12,144	322,311	-21,468	1,423,545	-31,188
	Nonpublic	14,500	- 537	113,793	1,407	44,359	782	34,358	- 1,451	204,010	- 2,799
	Total	131,403	- 4,864	783,046	5,158	359,437	-11,362	356,669	-22,919	1,630,555	-33,987

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[1] Excludes special education and part-time students.

[2] Projected enrollments are derived from Stanley E. Hecker and Frederick R. Ignatovich, Michigan Total, Public, and Nonpublic Membership Projections, Michigan State University, Department of Administration and Higher Education, October 2, 1984.

Source: Michigan Department of Education and Michigan State University, Department of Administration and Curriculum.

Table C-38

Michigan Elementary, Secondary, and Higher Education Student Enrollments, 1974-1984

School Year	Elementary[1]		Secondary[2]		Total K-12			Percent Change		
	Public	Private	Public	Private	Public	Private	Public and Private	Public	Private	Public and Private
1973-74	1,132,474	121,584	1,025,401	93,718	2,157,875	215,302	2,373,177	- 1.6	- 2.7	- 1.7
1974-75	1,103,770	117,023	1,033,493	93,324	2,137,263	210,347	2,347,610	- 1.0	- 2.3	- 1.1
1975-76	1,082,797	117,713	1,045,120	91,805	2,127,917	209,518	2,337,435	- 0.4	- 0.4	- 0.4
1976-77	1,055,682	160,445	1,062,390	54,653	2,118,072	215,098	2,333,170	- 0.5	2.7	- 1.7
1977-78	1,028,963	117,989	1,035,673	93,951	2,064,636	211,940	2,273,576	- 2.5	- 1.5	- 2.4
1978-79	1,003,355	116,213	962,802	87,846	1,966,157	204,059	2,170,216	- 4.8	- 3.7	- 4.5
1979-80	979,492	122,539	931,842	86,261	1,911,334	208,800	2,120,134	- 2.8	2.3	- 2.3
1980-81	953,039	116,291	838,849	85,247	1,791,888	201,538	1,993,426	- 6.2	- 3.5	- 6.0
1981-82	911,119	117,721	805,781	84,424	1,716,900	202,145	1,919,045	- 4.1	- 3.8	- 3.7
1982-83	875,266	115,013	784,462	83,337	1,659,728	198,350	1,858,078	- 3.3	- 1.9	- 3.2
1983-84	796,421	117,450	770,854	84,350	1,569,275	201,800	1,771,075	- 5.4	1.7	- 4.7

School Year	Public Higher Education				Private Higher Education		Total Higher Education	Percent Change
	Two-Year	Four-Year	Total	Percent Change	Total	Percent Change		
1973-74	152,715	221,893	374,608	5.4	51,160	1.1	425,768	4.9
1974-75	173,643	229,627	403,270	7.7	55,273	8.0	458,543	7.7
1975-76	197,199	240,442	437,641	8.5	61,081	10.5	498,722	8.8
1976-77	187,622	236,831	424,453	- 3.0	60,372	- 1.2	484,825	- 2.8
1977-78	186,876	236,618	423,494	- 0.2	61,906	2.5	485,400	0.1
1978-79	187,649	236,035	423,684	0.1	62,810	1.5	486,494	0.2
1979-80	231,915	240,600	450,154	6.3	64,333	2.4	514,487	5.8
1980-81	244,971	242,999	487,970	8.4	66,216	2.9	554,186	7.7
1981-82	211,871	235,027	446,897	- 8.4	68,406	3.3	515,303	- 7.0
1982-83	213,204	226,385	439,589	- 1.6	69,807	2.0	509,396	- 1.1
1983-84	217,230	226,999	444,229	1.1	71,433	2.3	515,662	1.2
1984-85	204,515	226,011	430,526	- 3.1	72,847	2.0	503,373	- 2.4

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[1] Includes grades K-6 and special education students.

[2] Includes grades 7-12 and part-time students.

Source: Michigan Department of Education and Michigan Department of Management and Budget.

Table C-39

Michigan Real and Personal Property Values, Taxes and Tax Rates, 1954-1984

Year	Assessed Valuation (Thousands)	County Equalized Valuation (Thousands)	State Equalized Valuation (Thousands)	Tax Levy		Average Millage Rate	
				Amount (Thousands)	Percent Change [1]	Millage	Percent Change [1]
1954	$12,782,605	$ 13,910,137	$ 16,722,075	$ 496,501	12.2	29.69	5.3
1955	13,481,826	15,505,027	17,551,275	563,871	13.5	32.13	8.2
1956	14,530,579	17,044,209	18,957,624	621,839	10.3	32.80	2.1
1957	15,452,973	18,511,832	21,602,319	710,464	14.1	32.89	0.3
1958	15,926,183	19,501,399	22,153,627	741,260	4.4	33.46	1.7
1959	16,126,254	19,883,366	22,438,384	786,649	6.2	35.06	4.8
1960	16,629,847	20,811,250	24,870,342	851,180	8.1	34.22	- 2.4
1961	16,784,842	22,422,661	25,202,552	874,775	2.8	34.71	1.4
1962	16,984,435	22,802,732	25,182,559	891,307	1.8	35.39	2.0
1963	17,190,129	23,211,055	25,797,485	934,869	4.9	36.24	2.4
1964	17,694,863	24,053,734	26,350,184	991,234	6.0	37.62	3.8
1965	18,370,770	24,743,771	27,080,518	1,038,623	4.8	38.35	1.9
1966	20,483,070	27,905,044	28,206,349	1,129,224	8.7	40.03	4.4
1967	24,260,128	29,807,504	29,891,295	1,288,682	14.1	43.11	7.7
1968	27,702,241	32,043,885	32,043,885	1,474,994	14.5	46.03	6.8
1969	30,079,712	35,083,861	35,101,273	1,660,861	12.6	47.32	2.8
1970	32,954,101	38,553,759	38,551,597	1,874,291	12.9	48.62	2.7
1971	36,593,349	41,562,933	41,648,959	2,063,280	10.1	49.54	1.9
1972	39,814,568	44,347,772	44,487,728	2,183,224	5.8	49.07	- 0.9
1973	42,648,458	47,492,752	47,612,674	2,420,403	10.9	50.84	3.6
1974	47,269,245	51,747,552	51,871,329	2,649,594	9.5	51.08	0.5
1975	51,148,731	55,802,269	56,800,875	2,903,906	9.6	51.12	0.1
1976	49,905,386	54,232,820	55,478,935	2,960,724	2.0	53.37	4.4
1977	53,867,947	59,305,512	59,512,999	3,207,096	8.3	53.89	1.0
1978	58,353,692	64,724,020	64,863,929	3,484,874	8.7	53.73	- 0.3
1979	64,169,105	72,449,827	72,512,251	3,889,378	11.6	53.64	- 0.2
1980	71,724,553	82,087,269	82,581,103	4,411,378	13.4	53.42	- 0.4
1981	80,255,988	91,930,069	91,799,179	4,898,386	11.0	53.36	- 0.1
1982	95,623,614	96,742,630	98,139,884	5,172,518	5.6	52.71	- 1.2
1983	97,967,489	98,327,004	98,302,925	5,187,279	0.3	52.77	0.1
1984	99,987,771	100,169,325	100,151,842	5,374,275	3.6	53.66	0.2

[1] From previous year.

Source: Michigan Department of Treasury, State Tax Commission.

Table C-40

Michigan Real and Personal Property Values by Class, 1971-1985

Year[1]	Real					
	Agriculture	Commercial	Industrial	Residential	Timber Cut-Over	Total[2]
1971	$2,631,643,039	$ 4,920,726,264	$4,732,051,343	$20,121,981,797	$ 166,389,114	$32,572,791,557
1972	2,767,998,546	5,289,180,485	5,006,268,660	21,837,363,296	198,391,053	35,099,202,040
1973	2,966,596,460	6,095,838,694	5,257,318,114	23,132,331,200	230,441,780	37,682,526,248
1974	3,253,519,145	6,748,511,652	5,614,001,496	25,185,954,680	259,918,052	41,061,905,025
1975	3,680,674,772	7,251,964,454	5,824,753,617	27,679,961,125	289,724,453	44,727,078,421
1976	3,931,334,132	7,643,557,366	6,356,640,800	29,652,286,598	339,314,392	47,923,133,288
1977	4,410,266,132	8,077,760,508	6,585,112,846	32,150,563,868	381,970,088	51,605,673,442
1978	5,050,142,536	8,650,737,622	6,935,567,107	35,256,657,107	422,603,165	56,315,708,253
1979	5,766,430,668	9,581,045,520	7,502,276,607	39,954,252,345	466,549,835	63,270,554,975
1980	6,328,135,948	10,633,386,181	8,181,599,425	46,669,303,911	687,806,033	72,500,231,498
1981	6,851,013,534	11,556,372,899	9,124,359,043	53,018,207,770	529,173,435	81,492,349,275
1982	7,378,223,333	12,186,372,328	9,418,002,354	57,491,186,325	514,930,615	87,187,419,816
1983	7,429,329,879	12,465,415,642	9,452,673,269	56,977,602,048	499,165,062	87,040,838,141
1984	7,458,643,844	12,743,237,220	9,535,645,848	58,002,894,224	491,394,296	88,446,427,830
1985[3]	7,403,969,514	13,515,504,501	9,867,244,730	59,069,664,700	465,134,767	90,525,492,733

Year	Personal					
	Agriculture	Commercial	Industrial	Residential	Utility	Total
1971	$ 94,686	$ 2,060,693,881	$5,128,931,506	$ 27,807,650	$1,847,296,876	$ 9,064,824,599
1972	80,064	2,134,366,046	5,227,795,300	28,592,264	1,979,750,787	9,370,584,461
1973	128,156	2,328,516,373	5,417,026,545	32,384,384	2,143,642,638	9,921,698,096
1974	207,163	2,591,166,371	5,812,222,781	36,173,370	2,379,939,037	10,819,708,722
1975	204,494	2,844,516,638	6,551,055,713	39,285,910	2,652,494,463	12,087,557,218
1976	199,605	1,524,568,091	3,568,938,839	42,203,838	2,402,751,114	7,538,661,487
1977	261,790	1,621,573,625	3,702,836,647	44,002,603	2,528,988,905	7,897,663,570
1978	255,864	1,781,876,984	4,029,145,367	52,710,272	2,690,893,405	8,554,881,892
1979	279,328	1,971,939,226	4,304,285,432	54,087,484	2,926,809,276	9,257,400,746
1980	258,028	2,213,845,812	4,667,437,859	63,271,040	3,201,005,728	10,145,818,467
1981	490,114	2,458,616,916	4,753,688,798	61,383,795	3,292,605,897	10,566,785,520
1982	294,784	2,662,733,997	4,829,682,933	61,639,336	3,468,291,966	11,022,643,016
1983	655,831	2,814,352,083	4,754,502,733	59,061,371	3,674,349,279	11,302,921,297
1984	497,858	3,043,079,274	4,791,167,816	58,468,096	3,831,915,969	11,725,129,013
1985[3]	500,785	3,481,144,373	5,104,870,618	57,335,215	3,626,411,968	12,270,262,959

[1] Figures through 1970 represent 50 percent of true cash value—figures after 1971 represent state equalized value.

[2] The total for real property from 1981 on includes small amounts of developmental property.

[3] 1985 valuations do not include effect of appeals.

Source: Michigan Department of Treasury, State Tax Commission.

Table C-41

Michigan State Equalized Property Valuations[1] by Local Unit of Government, 1970-1984

(Dollar Amounts in Thousands)

	City		Township		Village[2]		Total[3]	
	SEV	Percent of Total	SEV	Percent of Total	SEV	Percent of Total	SEV	Percent of Total
1970	$22,745,472.4	59.0	$15,806,125.1	41.0	$ 911,325.2	2.4	$ 38,551,597.5	100.0
1971	26,678,784.0	64.1	14,970,175.4	35.9	973,539.8	2.3	41,648,959.4	100.0
1972	28,093,947.2	63.1	16,393,781.1	36.9	1,047,373.0	2.4	44,487,728.3	100.0
1973	29,663,370.8	62.3	17,949,303.2	37.7	1,109,676.6	2.3	47,612,674.0	100.0
1974	31,398,819.4	60.5	20,472,509.3	39.5	1,258,173.8	2.4	51,871,328.7	100.0
1975	33,771,051.8	59.5	23,029,823.4	40.5	1,403,173.2	2.5	56,800,875.2	100.0
1976	31,402,221.7	56.6	24,076,713.1	43.4	1,372,455.4	2.5	55,478,934.8	100.0
1977	32,799,054.6	55.1	26,713,944.8	44.9	1,500,704.4	2.5	59,512,999.4	100.0
1978	34,863,658.9	53.7	30,000,269.7	46.3	1,662,869.4	2.6	64,863,928.6	100.0
1979	38,204,235.4	52.7	34,308,015.2	47.3	1,865,961.0	2.6	72,512,250.6	100.0
1980	42,833,546.9	51.9	39,747,556.3	48.1	2,115,573.5	2.6	82,581,103.2	100.0
1981	47,164,584.9	51.4	44,634,594.5	48.6	2,359,222.8	2.6	91,799,179.4	100.0
1982	49,958,916.4	50.9	48,180,967.8	49.1	2,535,173.4	2.6	98,139,884.2	100.0
1983	49,772,178.0	50.6	48,530,747.2	49.4	2,537,972.8	2.6	98,302,925.2	100.0
1984	50,620,737.4	50.5	49,531,104.5	49.5	2,587,958.6	2.6	100,151,841.9	100.0

[1] Real and personal property.

[2] Village data is also included in township totals.

[3] Total equals sum of township and city data.

Source: Michigan Department of Treasury, State Tax Commission.

Table C-42

Michigan General Property Taxes by Local Unit of Government, 1970-1984
(Dollar Amounts in Thousands)

	School			City			County		
Year	Amount	Percent of Total	Millage Rate	Amount	Percent of Total	Millage Rate	Amount	Percent of Total	Millage Rate
1970	$1,167,313.3	62.3	30.28	$417,562.7	22.3	18.36	$ 240,246.9	12.8	6.23
1971	1,293,298.2	62.7	31.05	455,499.5	22.1	17.07	259,503.5	12.6	6.23
1972	1,367,523.3	62.6	30.74	478,665.4	21.9	17.04	276,349.4	12.7	6.21
1973	1,543,161.8	63.8	32.41	515,281.2	21.3	17.37	294,461.2	12.1	6.18
1974	1,725,399.0	65.1	33.26	525,884.2	19.8	16.75	319,716.8	12.1	6.16
1975	1,899,787.4	65.4	33.45	564,565.6	19.4	16.72	347,099.5	12.0	6.11
1976	1,951,535.5	65.9	35.18	571,117.9	19.3	18.19	341,809.9	11.5	6.16
1977	2,141,067.6	66.8	35.98	586,803.2	18.3	17.89	369,748.3	11.5	6.21
1978	2,342,118.9	67.2	36.11	620,979.0	17.8	17.81	400,217.0	11.5	6.17
1979	2,622,639.0	67.4	36.15	677,378.3	17.4	17.73	447,480.4	11.5	6.17
1980	3,009,469.3	68.2	36.44	736,984.7	16.7	17.21	504,459.5	11.5	6.11
1981	3,372,394.3	68.8	36.74	786,309.9	16.0	16.67	554,531.7	11.3	6.04
1982	3,588,710.1	69.4	36.57	811,269.2	15.7	16.24	581,142.1	11.2	5.92
1983	3,607,966.7	69.6	36.70	811,594.9	15.6	16.31	589,176.3	11.4	5.99
1984	3,761,001.9	70.0	37.55	829,251.6	15.4	16.38	602,934.8	11.2	6.02

	Township			Village			Total		
Year	Amount	Percent of Total	Millage Rate	Amount	Percent of Total	Millage Rate	Amount	Percent of Total	Millage Rate
1970	$ 38,954.4	2.1	2.46	$ 10,214.2	0.5	11.21	$1,874,291.5	100.0	48.62
1971	43,820.7	2.1	2.96	11,158.2	0.5	11.46	2,063,280.1	100.0	49.54
1972	47,966.9	2.2	2.93	12,719.4	0.6	12.14	2,183,224.4	100.0	49.07
1973	53,656.6	2.2	2.99	13,841.8	0.6	12.47	2,420,402.6	100.0	50.84
1974	62,529.7	2.4	3.05	16,064.2	0.6	12.77	2,649,593.8	100.0	51.08
1975	74,693.5	2.6	3.24	17,759.6	0.6	12.66	2,903,905.6	100.0	51.12
1976	78,555.2	2.7	3.26	17,705.1	0.6	12.90	2,960,723.6	100.0	53.37
1977	90,448.4	2.8	3.39	19,028.3	0.6	12.68	3,207,095.8	100.0	53.89
1978	100,893.4	2.9	3.36	20,665.5	0.6	12.43	3,484,873.8	100.0	53.73
1979	118,691.2	3.1	3.46	23,189.3	0.6	12.43	3,889,378.1	100.0	53.64
1980	134,301.8	3.0	3.38	26,162.5	0.6	12.37	4,411,377.8	100.0	53.42
1981	156,528.4	3.2	3.51	28,622.1	0.6	12.13	4,898,386.4	100.0	53.36
1982	161,778.6	3.1	3.36	29,618.3	0.6	11.68	5,172,518.3	100.0	52.71
1983	148,086.4	2.8	3.05	30,454.3	0.6	12.00	5,187,278.6	100.0	52.77
1984	149,591.1	2.8	3.02	31,400.4	0.6	12.13	5,374,179.8	100.0	53.66

Source: Michigan Department of Treasury, State Tax Commission.

Table C-43

Mich[illegible] School Property Taxes, 1961-1984
([illegible]llar Amounts in Thousands)

	Operating			Debt and Building and Site			Total School Taxes		
Year	Amount	Percent of Total School Taxes	Millage Rate	Amount	Percent of Total School Taxes	Millage Rate	Amount	Percent of Total Property Taxes	Millage Rate
1961	$ 342,556.0	75.9	13.59	$108,891.4	24.1	4.32	$ 451,447.4	51.6	17.91
1962	363,570.0	78.1	14.44	102,154.7	21.9	4.05	465,724.7	52.3	18.49
1963	398,223.4	80.0	15.44	99,829.0	20.0	3.87	498,052.4	53.3	19.31
1964	433,945.3	81.2	16.47	100,425.1	18.8	3.81	534,370.4	53.9	20.28
1965	466,697.7	81.7	17.23	104,393.4	18.3	3.86	571,091.1	55.0	21.09
1966	524,235.6	82.4	18.59	111,974.1	17.6	3.97	636,209.7	56.3	22.56
1967	629,330.8	83.9	21.05	121,017.7	16.1	4.05	750,348.5	58.2	25.10
1968	761,094.8	84.7	23.75	137,772.1	15.3	4.30	898,866.9	60.9	28.05
1969	868,152.4	84.1	24.73	164,547.7	15.9	4.69	1,032,700.1	62.2	29.42
1970	989,877.6	84.8	25.68	177,435.7	15.2	4.60	1,167,313.3	62.3	30.28
1971	1,101,358.7	85.2	26.44	191,939.5	14.8	4.61	1,293,298.2	62.7	31.05
1972	1,171,356.3	85.7	26.33	196,167.0	14.3	4.41	1,367,523.3	62.6	30.74
1973	1,317,419.4	85.4	27.67	225,742.4	14.6	4.74	1,543,161.8	63.8	32.41
1974	1,494,394.3	86.6	28.81	231,004.6	13.4	4.45	1,725,399.0	65.1	33.26
1975	1,663,951.6	87.6	29.30	235,835.8	12.4	4.15	1,899,787.4	65.4	33.45
1976	1,702,285.7	87.2	30.69	249,249.8	12.8	4.49	1,951,535.5	65.9	35.18
1977	1,891,472.6	88.3	31.78	249,595.0	11.7	4.20	2,141,067.6	66.8	35.98
1978	2,072,999.5	88.5	31.96	269,119.4	11.5	4.15	2,342,118.9	67.2	36.11
1979	2,339,301.7	89.2	32.25	283,337.3	10.8	3.90	2,622,639.0	67.4	36.15
1980	2,710,253.0	90.1	32.82	299,216.4	9.9	3.62	3,009,469.3	68.2	36.44
1981	3,077,112.0	91.2	33.52	295,282.4	8.8	3.22	3,372,394.3	68.8	36.74
1982	3,293,603.8	91.8	33.56	295,106.3	8.2	3.01	3,588,710.1	69.4	36.57
1983	3,332,985.9	92.4	33.90	274,980.9	7.6	2.80	3,607,966.7	69.6	36.70
1984	3,483,595.8	92.6	34.78	277,406.1	7.4	2.77	3,761,001.9	70.0	37.55

Source: Michigan Department of Treasury, State Tax Commission.

Table C-44

U.S. and Michigan Personal and Per Capita Income, 1960-1984

Year	Michigan Personal Income (Millions)	Percent Change	U.S. Personal Income (Millions)	Percent Change	Michigan Per Capita Income	Percent Change	U.S. Per Capita Income	Percent Change	Michigan Per Capita Income as Percent of U.S. Per Capita Income
1960	$ 18,328	4.0	$ 398,843	4.3	$ 2,339	3.1	$ 2,216	2.6	105.6
1961	18,281	- 0.3	414,285	3.9	2,316	- 1.0	2,264	2.2	102.3
1962	19,560	7.0	440,023	6.2	2,466	6.5	2,369	4.6	104.1
1963	20,887	6.8	462,406	5.1	2,592	5.1	2,454	3.6	105.6
1964	22,904	9.7	495,188	7.1	2,798	7.9	2,592	5.6	107.9
1965	25,511	11.4	536,152	8.3	3,053	9.1	2,772	6.9	110.1
1966	27,844	9.1	582,630	8.7	3,271	7.1	2,980	7.5	109.8
1967	28,967	4.0	623,757	7.1	3,357	2.6	3,161	6.1	106.2
1968	32,010	10.5	683,561	9.6	3,681	9.7	3,430	8.5	107.3
1969	34,862	8.9	747,536	9.4	3,970	7.9	3,714	8.3	106.9
1970	35,976	3.2	803,922	7.5	4,044	1.9	3,945	6.2	102.5
1971	39,068	8.6	861,904	7.2	4,355	7.7	4,167	5.6	104.5
1972	43,282	10.8	944,852	9.6	4,796	10.1	4,515	8.4	106.2
1973	48,382	11.8	1,058,902	12.1	5,333	11.2	5,010	11.0	106.4
1974	51,740	6.9	1,162,203	9.8	5,680	6.5	5,448	8.7	104.3
1975	54,540	5.4	1,258,643	8.3	5,988	5.4	5,842	7.2	102.5
1976	61,324	12.4	1,385,201	10.1	6,726	12.3	6,367	9.0	105.6
1977	69,291	13.0	1,534,708	10.8	7,567	12.5	6,984	9.7	108.3
1978	77,532	11.9	1,726,185	12.5	8,426	11.7	7,772	11.3	108.4
1979	85,453	10.2	1,942,650	12.6	9,239	9.6	8,651	11.3	106.8
1980	90,703	6.1	2,156,710	11.0	9,801	6.1	9,494	9.7	103.2
1981	96,295	6.2	2,420,039	12.2	10,456	6.7	10,544	11.1	99.2
1982	98,007	1.8	2,575,831	6.4	10,751	2.8	11,113	5.4	96.7
1983	103,980	6.1	2,734,122	6.1	11,466	6.7	11,658	4.9	98.3
1984[1]	114,716	10.3	3,004,573	9.9	12,641	10.2	12,723	9.1	99.4

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[1] Estimated by the Michigan Department of Management and Budget.

Source: U.S. Department of Commerce, Bureau of Economic Analysis.

Table C-45

U.S. and Michigan Real Personal and Per Capita Income, 1965-1984[1]
(1967 Dollars)

Year	Real Michigan Personal Income (Millions)	Percent Change	Real U.S. Personal Income (Millions)	Percent Change	Real Michigan Per Capita Income	Percent Change	Real U.S. Per Capita Income	Percent Change	Real Michigan Per Capita Income as Percent of U.S. Real Per Capita Income
1965	$27,550	8.9	$567,357	6.4	$3,297	6.6	$2,933	5.1	112.4
1966	28,794	4.5	599,414	5.7	3,383	2.6	3,066	4.5	110.3
1967	28,967	0.6	623,757	4.1	3,357	- 0.8	3,161	3.1	106.2
1968	30,690	5.9	656,009	5.2	3,529	5.1	3,292	4.1	107.2
1969	31,521	2.7	680,816	3.8	3,590	1.7	3,383	2.8	106.1
1970	30,644	- 2.8	691,248	1.5	3,445	- 4.0	3,392	- 0.3	101.6
1971	32,102	4.8	710,556	2.8	3,578	3.9	3,435	1.3	104.2
1972	34,296	6.8	754,072	6.1	3,800	6.2	3,603	4.9	105.5
1973	35,972	4.9	795,569	5.5	3,965	4.3	3,764	4.5	105.3
1974	34,702	- 3.5	786,867	- 1.1	3,810	- 3.9	3,689	- 2.0	103.3
1975	34,024	- 2.0	780,796	- 0.8	3,735	- 2.0	3,624	- 1.8	103.1
1976	36,308	6.7	812,435	4.1	3,982	6.6	3,734	3.0	106.6
1977	38,410	5.8	845,569	4.1	4,195	5.3	3,848	3.1	109.0
1978	39,944	4.0	883,411	4.5	4,341	3.8	3,977	3.4	109.4
1979	39,055	- 2.2	893,583	1.2	4,223	- 2.7	3,979	0.1	106.1
1980	35,780	- 8.4	873,869	- 1.7	3,866	- 8.5	3,847	- 3.3	100.5
1981	34,751	- 2.9	888,414	1.7	3,773	- 2.4	3,871	0.6	97.5
1982	33,995	- 2.2	890,983	0.3	3,729	- 1.2	3,844	- 0.7	97.0
1983	35,069	3.2	916,261	2.8	3,867	3.7	3,907	1.7	99.0
1984[2]	37,379	6.6	965,790	5.4	4,119	6.5	4,090	4.7	100.7

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[1] Michigan personal income deflated by Detroit CPI; U.S. personal income deflated by U.S. CPI.

[2] Estimated by Michigan Department of Management and Budget.

Source: U.S. Department of Commerce, Bureau of Economic Analysis and U.S. Department of Labor, Bureau of Labor Statistics. Compiled by Michigan Department of Management and Budget.